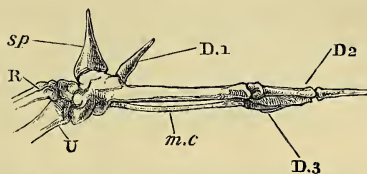


whence it projects on the radial edge, about 0·4 in. in length. In the accompanying figure (fig. 4) it is represented of the

Fig. 4.



End of right wing of *Parra jacana*, of the natural size. *Sp*, spur. *D. 1*, *D. 2*, *D. 3*, digits. *R*, radius. *U*, ulna. *m.c.*, metacarpals.

natural size. Immediately in front of it is the first digit, which in this bird consists of a single phalanx much pointed at the extremity.

XXXV.—*A Review of the Species of the Family Ploceidæ of the Ethiopian Region.* By Captain G. E. SHELLEY, F.Z.S.
—Part I. Viduinæ.

(Plate IX.)

THE Ploceidæ, or Weavers, most nearly approach the Fringillidæ, from which they may be readily separated by their possessing an extra or bastard primary. From the Alaudidæ, which also have a bastard primary, they may be distinguished by their feet, which, in the Ploceidæ, are adapted for clinging on to boughs, and in the Alaudidæ for running on the ground. On the other side of the Ploceidæ I should place the Oriolidæ and the Sturnidæ.

The present review has been undertaken in the hopes of assisting in the comprehension of this intricate family, and in forming a classification which I shall be able to follow in future. I divide the Ploceidæ into two subfamilies of nearly equal proportions, the Viduinæ and the Ploceinæ; these two subfamilies are not very sharply marked, but their members will, I trust, be easily recognized.

The first subfamily, Viduinæ, to which I shall confine my observations at present, is distinguished by the bastard pri-

mary being very small and finely pointed, except in the genus *Spermospiza* and, possibly, in a few of the more nearly allied species, which are excessively rare in collections, and of which I have not been able to examine good series; nevertheless, from their general appearance, I believe their affinities to be probably much nearer to *Pytilia* than to any other genus.

With regard to the specimens examined, I shall only notice types, those from new localities, and those with dates.

Key to the Genera of VIDUINÆ.

- a. Mantle never striped in any stage of plumage. Hind claw shorter and more curved. None of the inner feathers of the wing ever lanceolate. None of the tail-feathers ever obtusely pointed..... Div. 1. ESTRELDÆ.
- a¹. Bill comparatively slender and very unfinch-like. Distance from gonys to tip of lower mandible greater than the depth of the bill. Plumage
 - with no bright red nor yellow. Entire underparts uniform. Tail entirely black [p. 304. 1. *Nigrita*,
- b¹. Bill stouter and finch-like.
 - b². Tail square, and extending beyond the wing by about the length of the tarsus. Plumage mostly pale brown [p. 307. 2. *Philetarus*,
- c². Tail rounded or graduated.
- c³. Bill very stout; culmen arched.
- c⁴. With no red on the plumage, and no pale ends to the tail-feathers. Sexes very similar.
- c⁵. Breast white or nearly so, with dark mottlings on the sides. Tail rather short and rounded. Legs dark. Bill blue-black..... [p. 308. 3. *Spermestes*,
- d⁵. Breast rarely white, and never with dark mottlings on the sides. Legs and bill rarely very dark [p. 310. 4. *Munia*,
- d⁴. With white ends to the tail-feathers. Sexes dissimilar. With some red confined to the heads of the males only.... [p. 312. 5. *Amadina*,
- d³. Bill very stout, and shaped like a pyramid. Culmen straight. Upper mandible with a powerful tooth near the base. Plumage brown or black, with the head, rump, and tail red [p. 313. 6. *Pyrenestes*,

- e*³. Bill variable in strength. Culmen arched.
- e*⁴. Tail rounded, but never decidedly graduated. Bill longer. Rump and upper tail-coverts generally red. Tail generally washed with red.
- e*⁵. Wings more rounded; second primary never sinuated: primaries nearly uniform black or brown, never edged with olive, yellow, nor red. Bill blue or black. Mantle never grey.
- e*⁶. Bill very strong.
- e*⁷. Bill metallic blue, tipped with orange. Mantle black. Bastard primary very large, more than half the length of the next. Second and third quills considerably shorter than the fourth [p. 314.
7. *Spermospiza*,
- f*⁷. Bill black. Mantle red. Second, third, and fourth primaries nearly equal [p. 316.
8. *Cryptospiza*,
- f*⁶. Bill moderately strong. Breast black or brown, with large white spots .. [p. 317.
9. *Hypargus*,
- f*⁵. Wings more pointed; second primary generally sinuated.
- g*⁶. Quills never uniform but always broadly edged with olive, yellow, or red. Breast generally barred or boldly spotted, never red. Bill generally entirely red. Never with a distinct red band through the eye [p. 318.
10. *Pytilia*,
- h*⁶. Quills uniform brown. Throat and breast generally uniform vinous red. Generally with minute white spots on the sides of the chest. Bill never entirely red [p. 321.
11. *Lagonosticta*,
- f*⁴. Tail generally decidedly graduated. Bill short. Tail-feathers rarely shaded with red. Bastard primary always small; second primary never sinuated. Tail reaching beyond the wing by more than the length of the tarsus [p. 326.
12. *Estrelda*,
- g*⁴. Tail square and very short, not reaching beyond the wing by nearly the length of the tarsus [p. 337.
13. *Ortygospiza*,

- b. Mantle striped in some stage of plumage. Hind claw longer, less curved, and more slender. Generally with some of the inner feathers of the wing lanceolate. Tail-feathers often obtusely pointed. . Div. 2. VIDUÆ.
- b¹. In adult males feathers of the back never mottled with dark centres.
- b². Tail square, or square with the exception of the four centre feathers. Plumage with no bright red nor yellow.
- b³. Tail entirely square. Entire plumage glossy black. Bill and legs red 14. *Hypochera*, [p. 338.]
- c³. Tail square, with the two or four centre feathers very much elongated..... 15. *Vidua*, [p. 339.]
- c². Tail rounded or graduated, and never very short: the ends of the feathers never obtusely pointed. Plumage: tail and breast entirely black 16. *Coliuspasser*, [p. 343.]
- d². Tail square, very short, and the feathers obtusely pointed. Plumage: tail brown, with pale margins to the feathers; adult males always with some bright red or yellow 17. *Pyromelana*, [p. 350.]
- e¹. Back always brown, with dark centres to the feathers. Tail short and square, with the ends of the feathers obtusely pointed..... 18. *Quelea*, [p. 355.]

1. NIGRITA.

1841. *Æthiops*, Strickl. P. Z. S. 1841. p. 30 Type.
(previously employed in Mammalia). *N. canicapilla*.
1842. *Nigrita*, Strickl. P. Z. S. 1842, p. 145. *N. canicapilla*.
1860. *Percnopsis*, Heine, J. f. O. 1860, p. 144. *N. fusconota*.

The genus *Nigrita* is a very abnormal form with regard to the bill, and has been placed by Prof. Sundevall ('Avium Tentamen,' p. 20) in his family Ampelinæ, but, I consider, should be retained in the present family.

This genus consists of three groups: the first represented by the white-breasted and more slender forms *N. fusconota*, from south of the equator, and its northern representative *N. uropygialis*.

The second group consists of two stout little birds, with very arched bills, much compressed at their sides, *N. luteifrons* and *N. lucieni*, which I believe to be distinct species, although Dr. Hartlaub once described *N. lucieni* as the immature

plumage of *N. luteifrons*. In the British Museum there are two adults, one from the Camaroons (*Crossley*), and an immature bird from the Gaboon (*Du Chaillu*), rightly determined as *N. luteifrons*. This immature bird has the plumage nearly uniform bluish grey, slightly darker above, and consequently differs from the type of *N. lucieni* and from a perfectly similar specimen from the Gaboon (*Walker*) in these two latter birds having the upper part of the head exactly similar to the adult of *N. luteifrons*, and on the sides of the head a broad black circle round the eye extending forward to the bill. Although I cannot prove that *N. lucieni* is not the adult female of *N. luteifrons*, I feel justified in keeping them separate.

The third group consists of *N. canicapilla*, its northern representative, *N. emiliæ*, and the rufous-breasted *N. bicolor*. *N. cinereocapilla*, Sharpe, is only a printer's error for *N. canicapilla*. *N. canicapilla*, Hartl. (Orn. W.-Afr. p. 130), from Aguapim should, I have no doubt, be referred to *N. emiliæ*, which, from my own experience, is the common species near Abouri in those mountains. Although I have not seen a SÉNÉGAMBIAN specimen, I feel little doubt that the *N. canicapilla*, Rochebrune (Faun. SÉNÉGAMB. p. 236), refers to *N. emiliæ*. The locality "Gaboon" for *N. emiliæ*, in Sharpe's Cat. Afr. B. p. 61, is, I think, undoubtedly incorrect, having been copied from a dealer's label.

Key to the Species.

- a. Underparts white. Mantle pale brown.
 - a¹. Lower back uniform with mantle 1. *N. fusconota*.
 - b¹. Lower back buff, much paler than mantle..... 2. *N. uropygialis*.
- b. Underparts black or grey. Mantle grey.
 - c¹. Forehead white. No white spots on wings.
 - c². Underparts black in adults, grey in young.... 3. *N. luteifrons*.
 - d². Underparts always grey. A broad black band round the eye 4. *N. lucieni*.
 - d¹. Forehead and underparts black. Some white spots on wings.
 - e². Slightly larger. Lower back white. With white tips to the greater wing-coverts and inner secondaries 5. *N. canicapilla*.
 - f. Slightly smaller. Lower back darker. With

no white on the greater wing-coverts nor

secondaries 6. *N. emiliæ*.

c. Underparts reddish brown. Mantle dark slaty brown 7. *N. bicolor*.

1. NIGRITA FUSCONOTA.

Nigrita fusconotus, Fraser, P. Z. S. 1842, p. 145, Fernando Po (type exam.); id. Zool. Typ. pl. 49.

Percnopsis dorsofusca, Heine, J. f. O. 1860, p. 144.

Hab. W. Afr., from the Congo to the Gaboon and Fernando Po.

a, ♂. April, Chinchonxo (*Shelley Mus.*).

2. NIGRITA UROPYGIALIS.

Nigrita uropygialis, Sharpe, Ibis, 1869, p. 384, pl. 11. fig. 1, Fantee (type exam.).

Hab. W. Afr., Gold Coast.

3. NIGRITA LUTEIFRONS.

Nigrita luteifrons, J. & E. Verr. Rev. et Mag. Zool. 1851, p. 420, Gaboon.

Hab. W. Afr., Gaboon and Camaroons.

4. NIGRITA LUCIENI.

Nigrita bocagei, Sharpe, MS.

Nigrita luteifrons, jr., Hartl. J. f. O. } With the same type,
1861, p. 176. } Gaboon (Brit. Mus.).

Nigrita lucieni, Sharpe & Bouvier, Bull. S. Z. France, 1878, p. 75, Ungomoyo and Condé (type in *Brit. Mus.*).

Hab. W. Afr., Congo to Gaboon.

5. NIGRITA CANICAPILLA.

Æthiops canicapillus, Strickl. P. Z. S. 1841, p. 30, Fernando Po.

Nigrita canicapilla, Fraser, P. Z. S. 1842, p. 145; id. Zool. Typ. pl. 48.

Nigrita cinereocapilla, Sharpe, Ibis, 1869, p. 385 (laps. cal.).

Hab. W. Afr., Angola, from the Quanza to Abeokuta and Fernando Po.

a, ♂. March, Chinchonxo (*Shelley Mus.*).

6. NIGRITA EMILIÆ.

Nigrita emiliæ, Sharpe, Ibis, 1869, p. 384, pl. 11. fig. 2,

Fantee (type exam.); id. Cat. Afr. B. 1871, p. 61, "Gaboon (Verreaux)"!

? *Nigrita canicapilla*, Rochebrune, Faun. Sénégalamb. 1884, p. 236, Casamanse, Gambia.

Hab. W. Afr., Gold Coast and ? Senegambia (Rochebrune).

a. February, Abouri (Shelley).

7. *NIGRITA BICOLOR.*

Pytelia bicolor, Hartl. Syst. Verz. Brem. 1844, p. 76, Gold Coast.

Nigrita bicolor, Sclat. Contr. Orn. 1852, p. 83.

Percnopis bicolor, Hein, J. f. O. 1860, p. 144.

Hab. W. Afr., from the Congo to Senegambia.

a. January, Cape-Coast Castle (Shelley). *b.* February, Abouri (Shelley).

2. *PHILETÆRUS.*

1837. *Philetairus*, Smith, Charlesworth's Mag. Type.

Nat. Hist. 1837, p. 536 *P. socius*.

Key to the Species.

- a.* Mantle dark brown, with pale brown edges to the feathers. Breast pale brown, with a patch on the sides of the body of black feathers edged with buff. 8. *P. socius*.
- b.* Mantle uniform pale brown.
 - b*¹. Crown black. Underparts white, with the sides of the body brown, mottled with large black blotches; central line of the breast similarly mottled 9. *P. cabanisi*.
 - c*¹. Crown white. Underparts uniform brown, like the mantle 10. *P. arnaudi*.

8. *PHILETÆRUS SOCIUS.*

Loxia socia, Lath. Ind. Orn. i. 1790, p. 381, Cape.

Ploceus socius, Cuv. Règne An. i. 1817, p. 384.

Coccothraustes socia, Vieill. N. D. xiii. 1817, p. 540.

Philetairus lepidus, Smith, Charlesworth's Mag. Nat. Hist. 1837, p. 536.

Euplectes lepidus, Swains. An. in Menag. 1838, p. 309.

Philetærus lepidus, Smith, Ill. Zool. S. Afr. 1838, pl. 8.

Hab. S. Afr., between about 20° and 30° S. lat.

9. PHILETERUS CABANISI.

Nigrita cabanisi, Fischer & Reichen. J. f. O. 1884, p. 54,
Pare in Masai (type exam.).

Hab. E. Afr., Pare.

10. PHILETERUS ARNAUDI.

"*Nigrita arnaudi*, Pucheran, MS. Paris Mus.;" Bp. Consp.
i. 1850, p. 444, White Nile; Heugl. Orn. N.O.-Afr. pl. 20.

Hab. N.E. & E. Afr., between 10° N. lat., and 3° S. lat.,
from the White Nile to Masai-land.

a, ♂. March, Lado. *b*. April, Wasonerbor (*Shelley Mus.*).

3. SPERMESTES.

1837. *Spermestes*, Swains. B. W. Afr. i. Type.
p. 201 *S. cucullatus*.

1861. *Amaurestes*, Reichb. Singvög. p. 86,
pl. 44. fig. 322. *S. fringilloides*.

Key to the Species.

- a*. Larger. Wing more than 2·2 inches long.
Head and neck black. Mantle and wings
brown, with a few white streaks on the wing-
coverts 11. *S. fringilloides*.
- b*. Smaller. Wing less than 2 inches long. With
no white streaks on the wing-coverts.
 - b*¹. Mantle and quills earthy brown, with a
metallic green patch on the shoulders 12. *S. cucullatus*.
 - c*¹. Mantle chestnut. Quills black, partially
barred with white 13. *S. rufodorsalis*.
 - d*¹. Head, neck, and mantle uniform black.
 - d*². Quills and rump strongly barred with
white. 14. *S. poens*
 - e*². Quill and rump uniform black, the former
occasionally marked with a few white
spots 15. *S. bicolor*.

11. SPERMESTES FRINGILLOIDES.

Ploceus fringilloides, Lafr. Mag. Zool. 1835, pl. 48.

Amadina fringilloides, Gray & Mitchell, Gen. B. ii. 1849,
p. 370.

Munia fringilloides, Bp. Consp. i. 1850, p. 453.

Amaurestes fringilloides, Reichb. Singvög. 1861, p. 86, pl. 44. fig. 322.

Spermestes fringilloides, Oust. Nouv. Arch. du Mus. 1879, p. 112.

Hab. E. and W. Afr. : Zanzibar Province, Mosambique, Gaboon, Liberia, and Senegambia.

a. April, Zanzibar (*Shelley Mus.*).

12. SPERMESTES CUCULLATUS.

Spermestes cucullatus, Swains. B. W. Afr. i. 1837, p. 201, Afr. ; Müll. Descr. Nouv. Ois. Afr. 1854, part iv. pl. 16.

Loxia prasipteron, Less. Rev. Zool. 1839, p. 104, Senegal.

Amadina cucullata, Sundev. Æfv. K. Vet.-Ak. Förh. Stockh. 1849, p. 159.

Coccothraustes scutatus, Heugl. Syst. Uebers. 1856, p. 39. no. 388, N.E. Afr.

Spermestes scutatus, Heugl. J. f. O. 1863, p. 18.

Amadina, sp. ?, Kirk, Ibis, 1864, p. 321, Shupanga, on Zambesi.

Estrela cucullata, Gurney, Ibis, 1868, p. 46.

Hab. The whole of Africa south of about 16° N. lat., and the Comoro Islands.

a. August, Rimo, N.E. Afr. *b, c.* October and November, Durban. *d.* April, Accra. *e, f.* February and March, Cape-Coast Castle. *g.* April, Elmira (*Shelley Mus.*).

13. SPERMESTES RUFODORSALIS.

Spermestes rufodorsalis, Peters, J. f. O. 1863, p. 401, Inhambani.

Amadina punctipennis, Bianc. Spec. Zool. Mosamb. fasc. xviii. 1867, p. 325, pl. 4. fig. 1.

Hab. E. and S. Afr., east coast from Lamu to Inhambani.

14. SPERMESTES POENSIS.

Amadina poensis, Fraser, P. Z. S. 1842, p. 145, Fernando Po ; id. Zool. Typ. pl. 50. fig. 1.

Spermestes poensis, Bp. Consp. i. 1850, p. 454.

Hab. W. Afr., Congo to Gaboon and Fernando Po. Probably entirely replaced by *S. bicolor* north of the Equator.

15. SPERMESTES BICOLOR.

Amadina bicolor, Fraser, P. Z. S. 1842, p. 145, Cape Palmas; id. Zool. Typ. pl. 50. fig. 2.

Spermestes bicolor, Bp. Consp. i. 1850, p. 454.

? *Amadina poensis*, Hartl. Orn. W.-Afr. 1857, p. 148 (part.) Casamanse.

? *Spermestes poensis*, Rochebrune, Faun. Sénégal. 1884, p. 248.

Hab. W. Afr., from the Gold Coast to the Bulama Islands and probably Senegambia.

a. February, Abouri (*Shelley*).

4. MUNIA.

1836. *Munia*, Hodgs. As. Research. xix. Type.
 p. 153. *M. rubronigra*.
 1850. *Padda*, Reichb. Syst. Nat. pl. 76. . *M. oryzivora*.
 1851. *Oryzornis*, Cab. Mus. Hein. i. 1851,
 p. 172. *M. oryzivora*.
 1851. *Urolonga*, Cab. t. c. p. 173 . . . *M. cantans*.
 1861. *Eudice*, Reichb. Singvög. p. 46, pl. 16.
 figs. 146-149 *M. cantans*.
 1861. *Lepidopygia*, Reichb. t. c. pl. 17. fig.
 152 *M. nana*.

This genus, as I have employed it, may have somewhat the appearance of a refuge for the destitute. It is not a very sharply defined group, but I consider it more advantageous to keep these five species together than, as I should otherwise have done, to divide them into five genera, which would follow each other in the same order in which I have placed the species. I have examined good specimens of all these forms, and do not find distinguishing characters of sufficient importance to render their generic separation imperative, and they appear to me to constitute a group sufficiently easily recognizable not to be confounded with any other of the genera that I have employed.

Key to the Species.

- a. Upper parts olive-yellow. Sides of head white.
In the male the black of the chin and upper
throat extends behind the ear-coverts 16. *M. sharpii*.
- b. With no olive nor yellow on the upper parts.
 - b¹. Bill not pink. Cheeks and ear-coverts not
uniform white.
 - b². Lower mandible red, upper one blackish.
Upper throat black. Rump and upper
tail-coverts brown 17. *M. nana*.
 - c². Both mandibles of the same colour. No
black on throat. Head more or less
spotted.
 - c³. Underparts nearly white. Rump and
upper tail-coverts black. Inner wing-
feathers barred. 18. *M. cantans*.
 - d³. Head and neck grey. Breast rufous-buff.
Rump and upper tail-coverts white 19. *M. caniceps*.
 - e¹. Bill pink. Mantle and chest grey. Cheeks
and ear-coverts white 20. *M. orizivora*.

16. *MUNIA SHARPII*.

Amadina sharpii, Nicholson, P. Z. S. 1878, p. 130, pl. 10,
Abeokuta (type exam.).

Hab. W. Afr., Abeokuta.

17. *MUNIA NANA*.

Pyrrhula nana, Pucher. Mag. Zool. 1845, pl. 58, Mada-
gascar.

Spermestes nana, Bp. Consp. i. 1850, p. 454; Milne-Edw.
and Grandid. Hist. Madag. Ois., Atlas, ii. pl. 183. figs. 1, 2.

Lepidopygia nana, Reichb. Singvög. 1861, p. 46, pl. 17.
fig. 152.

Hab. Madagascar.

18. *MUNIA CANTANS*.

Loxia cantans, Gm. S. N. i. 1788, p. 859.

Coccothraustes cantans, Vieill. N. D. xiii. 1817, p. 529.

Fringilla cantans, Licht. Verz. Doubl. 1823, p. 27.

Estrelda cantans, Rüpp. Syst. Uebers. 1845, p. 77.

Amadina cantans, Gray & Mitchell, Gen. B. ii. 1849,
p. 370.

Uroloncha cantans, Cab. Mus. Hein. i. 1851, p. 173.

Eudice cantans, Reichb. Singvög. 1861, p. 46, pl. 16. figs. 146-149.

Spermestes cantans, Finsch, Trans. Z. S. vii. 1869, p. 268.

Hab. N.E., E., and W. Afr., southward from about 16° N. lat. to Massiro in 4° S. lat. E. Africa, and in W. Africa confined to Senegambia.

19. MUNIA CANICEPS.

Pytelia caniceps, Reichen. Orn. Centralbl. 1879, p. 139, Massa in E. Afr.; Reichen. & Schal. J. f. O. 1879, p. 326, pl. 2. fig. 3 (type exam.).

Spermestes caniceps, Hartl. Abhandl. nat. Ver. Brem. viii. 1882, p. 203.

Hab. E. Afr., Lado to Masai-land.

a, ♂. April, Tarrangola (*Emin Bey, Shelley Mus.*).

20. MUNIA ORIZIVORA.

Loxia orizivora, Linn. S. N. i. p. 302.

Padda, Vieill. Ois. Chant. 1805, pl. 61.

Coccothraustes orizivora, Vieill. N. D. xiii. 1817, p. 545.

Munia orizivora, Bp. Consp. i. 1850, p. 451.

Oryzornis orizivora, Cab. Mus. Hein. i. 1851, p. 172.

Padda orizivora, Reichb. Singvög. 1861, p. 42, pl. 15. figs. 135-139.

Hab. E. Afr., only as an introduced bird, Zanzibar Province, Mauritius, and Réunion.

5. AMADINA.

1827. *Amadina*, Swains. Zool. Journ. iii. 1827, Type.

p. 349 *A. fasciata*.

1851. *Sporothlastes*, Cab. Arch. f. Naturg.

1847, pt. i. p. 331 *A. fasciata*.

Key to the Species.

- a*. Upper parts barred with black. Males with the ear-coverts and a broad band across the throat red. 21. *A. fasciata*.
- b*. Upper parts with no black bars. Males with the entire head red 22. *A. erythrocephala*.

21. AMADINA FASCIATA.

Loxia fasciata, Gm. S. N. i. 1788, p. 859.

Loxie fasciée, Vieill. Ois. Chant. 1805, pl. 58.

Loxia jugularis, Shaw (*fide* Giebel, Thes. Orn.).

Coccothraustes fasciatus, Vieill. N. D. xiii. 1817, p. 529.

Fringilla detruncata, Licht. Verz. Doubl. 1823, pp. 25, 26.

Amadina fasciata, Swains. Zool. Journ. iii. 1827, p. 349 ;
id. B. W. Afr. i. pl. 15.

Sporothlastes fasciatus, Cab. Mus. Hein. i. 1851, p. 173.

Hab. N.E., E., and W. Afr., southward from about 17°
N. lat. to Masai-land in E. Africa, and to Casamanse on the
West Coast.

22. AMADINA ERYTHROCEPHALA.

Loxia erythrocephala, Linn. S. N. i. 1766, p. 301.

Loxia brasiliانا, Gm. S. N. i. 1788, p. 848.

Grevelin, Vieill. Ois. Chant. 1805, pl. 49.

Coccothraustes erythrocephala, Vieill. N. D. xiii. 1817,
p. 530.

Loxia maculosa, Burch. Trav. S. Afr. ii. 1822, p. 269,
S. Afr.

Fringilla reticulata, Voigt, Cuv. Thierreich, i. 1831, p. 582.

Amadina erythrocephala, Smith, Ill. Zool. S. Afr. 1841,
pl. 69.

Sporothlastes erythrocephala, Cab. Mus. Hein. i. 1851,
p. 173.

Hab. S. and W. Afr. It ranges from Matabele and the
Transvaal to Great and Little Namaqua, Damara, Lake
Ngami, Benguela, and northward to the Loango Coast in
W. Africa.

a, ♂. June, Bloomfontein (*Shelley Mus.*).

6. PYRENESTES.

Type.

1837. *Pyrenestes*, Swains. B. W. Afr. i. p. 156 . *P. ostrinus*.

Of this genus I can only recognize one species : it is
subject to considerable variation, which I am unable to
account for.

The general plumage is sometimes brown and sometimes

black ; that this is not a sexual difference is fully proved by Mr. J. Büttikofer, who met with a colony all breeding in the brown plumage in Liberia in October (Notes from the Leyden Mus. 1885, p. 199). That the colouring is not mere seasonal is shown by a specimen in the British Museum, labelled “ ♂ , November, Shonga on Niger (*Forbes*),” which is a large specimen in a black plumage ; and I have never seen a bird in the moult between the two.

With regard to size, a typical large brown specimen in my own collection measures—wing 2·95 inches ; while the type of the small race, *P. coccineus*, has the wing 2·2 inches. Two of my own specimens from the Gold Coast, agreeing well with the figure of *P. coccineus*, have their wing 2·45 and 2·70 inches ; so I cannot admit size to be of any specific value, and the difference in the strength of the bill, which is very variable, is probably due to age. In the British Museum there is a black specimen of the small form from the Gold Coast.

23. PYRENESTES OSTRINUS.

Loxia ostrinus, Vieill. Ois. Chant. 1805, p. 79, pl. 48.

Coccothraustes ostrinus, Vieill. N. D. xiii. 1817, p. 548.

Pyrenestes sanguineus, Swains. B. W. Afr. i. 1837, p. 156, pl. 9.

Pyrenestes coccineus, Cass. Pr. Ac. Philad. 1848, p. 67, Sierra Leone, Monrovia ; id. Journ. Ac. Philad. 1849, pl. 31. fig. 2.

Pyrenestes ostrinus, Bp. Consp. 1850, p. 450.

Pyrenestes personatus, Du Bus, Bull. Ac. Brux. xxii. part 1, 1855, p. 151, Senegal.

Hab. W. Afr., from the Gaboon to Senegambia.

7. SPERMOSPIZA.

1837. *Spermophaga*, Swains. B. W. Afr. i. p. 164 Type.
 (nec Schönk. 1833, Ent.) . . . *S. hæmatina*.
 1840. *Spermospiza*, Gray, List Gen. B. p. 43 *S. hæmatina*.

With regard to the genus *Spermospiza* I agree with Verreaux in recognizing two species—*S. hæmatina*, origi-

nally named after a male specimen, and *S. guttata*, after a female specimen. Although there is a great resemblance between these two species, and the sexes differ in a remarkably similar manner, there appear to be good characters for their separation, and distinct geographical areas for their distribution.

M. Rochebrune (Faun. Sénégal. p. 246) only admits one species of *Spermospiza*; but as his description of the sexes and young does not agree with the evidence before me, I have been obliged to disregard his observations. I have in my own collection an undoubtedly young bird with no white whatever on the breast (agreeing perfectly with a young bird in the British Museum), and an adult bird with the sides of the head, upper tail-coverts, and the abdomen entirely black, which was marked "male" by Mr. Burton, naturalist, in Wardour Street; and I have no doubt as to his correctness in this matter, as at the time I asked him to be very particular, for the bird having died in Mr. Wiener's aviary, he was specially anxious to ascertain the sex. This form, however, is regarded by M. Rochebrune as the female, and the specimens with white spots on the abdomen as the young.

The remaining genera of the division *Estrela* appear to constitute three very natural groups:—

1. *Spermospiza* group: comprising *Spermospiza*, *Cryptospiza*, and *Hypargus*.
2. *Pytilia* group: comprising *Pytilia* and *Lagonosticta*.
3. *Estrela* group: comprising *Estrela* and *Ortygospiza*.

Key to the Species.

- a. Bill only tipped with orange-red, that colour not extending more than halfway down the cutting-edge of the lower mandible.
 - a¹. Entire upper parts as well as the sides of the head and abdomen uniform black 24. *S. hæmatina*, ♂.
 - b¹. Sides of the head, front of crown, and upper tail-coverts red, of a much darker shade than the throat; abdomen black, spotted or barred with white *S. hæmatina*, ♀.

b. Bill with the entire cutting-edges of both mandibles broadly edged with orange-red; sides of the head and upper tail-coverts bright red, of the same shade as the throat; no portion of the crown nor centre of the forehead washed with red in either sex.

b¹. Abdomen uniform black 25. *S. guttata*, ♂.

c¹. Abdomen black, spotted or barred with white *S. guttata*, ♀.

24. SPERMOSPIZA HÆMATINA.

Loxia hæmatina, Vieill. Ois. Chant. 1805, p. 102, pl. 67, Africa.

Coccothraustes hæmatina, Vieill. N. D. xiii. 1817, p. 534.

Spermophaga cyanorhyncha, Swains. B. W. Afr. i. 1837, p. 164.

Spermospiza hæmatina, Gray, List Gen. B. 1840, p. 43 (part.).

Spermospiza guttata, Sharpe, Ibis, 1869, p. 384, ♀, Fantee. Hab. W. Afr., Abeokuta to Senegambia.

a. March, Cape-Coast Castle (*Shelley*). b. March, Wassaw (*Shelley Mus.*).

25. SPERMOSPIZA GUTTATA.

Loxia guttata, Vieill. Ois. Chant. 1805, p. 103, pl. 68, ♀, Congo.

Coccothraustes guttata, Vieill. N. D. xiii. 1817, p. 533.

Fringilla pustulata, Voigt (nec Ill.), Cuv. Thierr. ii. 1831, p. 581.

Spermospiza guttata, J. Verr. Rev. et Mag. Zool. 1852, p. 312.

Spermospiza hæmatina, Oust. Nouv. Arch. du Mus. 1879, p. 113, Ogowé.

Hab. W. Afr., Congo to the Gaboon.

8. CRYPTOSPIZA.

1884. *Cryptospiza*, Salvad. Ann. Mus. Civ. Type.

Gen. 1884, p. 180 *C. reichenowi*.

So far as I can judge from a hasty examination of the type of *Cryptospiza reichenowi*, which is mounted in the Berlin Museum, I think it is rightly placed in a genus by

itself, and apparently forms a somewhat natural link between *Spermospiza* and *Hypargus*.

26. *CRYPTOSPIZA REICHENOWI*.

Pytelia reichenowii, Hartl. Ibis, 1874, p. 166, Bondongo, in Camaroons; Reichen. J. f. O. 1875, pl. 2. fig. 1.

Cryptospiza reichenowi, Salvad. Ann. Mus. Civ. Gen. 1884, p. 180, Shoa.

Hab. N.E. and W. Afr., Shoa and Camaroons.

9. *HYPARGUS*.

1861. *Hypargus*, Reichb. Singvög. p. 21, Type.

pl. 6. fig. 49 *H. margaritatus*.

As all the species of this genus are rare, I have not been able to examine a sufficient number of specimens to draw any definite characters from the relative measurements of the quills.

Key to the Species.

a. Dark portion of the breast black; entire throat and sides of the head red.

a¹. Spots on breast smaller and snow-white 27. *H. niveiguttatus*.

b¹. Spots on breast larger and shaded with pink. 28. *H. margaritatus*.

b. Dark portion of the breast rufous-brown; sides of the head and throat grey 29. *H. monteiri*.

27. *HYPARGUS NIVEIGUTTATUS*.

Spermospiza guttata, Bianc. (nec V.), Spec. Zool. Mosamb. fasc. xviii. 1867, p. 326, Mosambique.

Spermophaga niveiguttata, Peters, J. f. O. 1868, p. 133, Inhambani.

Hypargus niveiguttatus, Shelley, P. Z. S. 1881, p. 588, pl. 52. fig. 2.

Hab. E. and S. Afr. The east coast between 2° and 25° S. lat., from Lamu to Inhambani.

28. *HYPARGUS MARGARITATUS*.

Spermophaga margaritata, Strickl. Ann. & Mag. Nat. Hist. xiii. 1844, p. 418, pl. 10, Cape Town.

Amadina verreauxi, Des Murs, Icon. Orn. 1849, pl. 64.

Habropyga margaritata, Bp. Consp. i. 1850, p. 461.

Hypargos verreauxi, Reichb. Singvög. 1861, p. 22, pl. 6. fig. 49.

Hypargus margaritatus, Sharpe, ed. Layard's B. S. Afr. 1884, p. 476.

Hab. S. Afr., Cape Town.

29. HYPARGUS MONTEIRI.

Pytelia monteiri, Hartl. P. Z. S. 1860, p. 111, pl. 161, Bembe in Angola.

Hab. N.E. and W. Afr.: Upper White Nile, about 5° N. lat., and from Angola to the Loango Coast.

a, ♀. November, Kuderno (*Emin Bey*). *b*, ♂; *c*, ♀. Landa (*Shelley Mus.*).

10. PYTELIA.

1837. *Pytelia*, Swains. B. W. Afr. i. p. 202, Type.

note *P. phænicoptera*.

1837. *Pytelia*, Swains. Class. B. ii. p. 280. *P. phænicoptera*.

1851. *Zonogastris*, Cab. Mus. Hein. i.

p. 172 *P. melba*.

1861. *Marquetia*, Reichb. Singvög. p. 48. *P. melba*.

Pytelia and *Lagonosticta* run very naturally into each other, and show their affinities to *Hypargus* mostly in the pattern of the colouring of the underparts of some of the *Pytelie* and in the upper parts of the *Lagonostictæ*.

Pytelia capistrata, Hartl., I refer to under the genus *Estrelda*.

I have not seen a specimen of *P. lineata*.

Key to the Species.

- a.* Upper parts entirely olive; underparts pale olive, many of the breast-feathers with dusky centres, each enclosing two large white spots. 30. *P. nitidula*.
- b.* Breast black, boldly spotted with white in the male; entire plumage olive in the female; bill red 31. *P. schlegeli*.
- c.* Breast barred; rump and upper tail-coverts and portion of the tail red; bill uniform red or slaty grey.

- c¹. Of a more olive shade; wing-feathers never margined with bright red.
- c². Bill red in the adults; general plumage less grey.
- c³. Quills edged with olive-yellow; in adult males lower throat and crop yellow; breast paler and more distinctly barred 32. *P. melba*.
- d³. Quills edged with orange-yellow; in adult males lower throat and crop grey; breast darker and less regularly barred 33. *P. afra*.
- d². Bill slaty blue; general plumage greyer; wing-feathers margined with deep yellow 34. *P. hypogrammica*.
- d¹. General plumage grey; wing-feathers margined with bright red.
- e². Bill slaty grey 35. *P. phænicoptera*.
- f². Bill red 36. *P. lineata*.

30. PYTILIA NITIDULA.

Estrelda nitidula, Hartl. Ibis, 1865, p. 269, Natal.

Amadina hartlaubi, Bianc. Spec. Zool. Mosamb. fasc. xviii.

1867, p. 324, pl. 4. fig. 2.

Hab. S. Afr.: Natal, and "Mosambique" (*Bianconi*), probably Inhambani.

α, ♂. Durban (*Shelley Mus.*).

31. PYTILIA SCHLEGELI.

Pytelia schlegeli, Sharpe, Ibis, 1870, p. 482, pl. 14. fig. 2 ♂,

3 ♀, Fantee.

Hab. W. Afr.: Gaboon, Fantee, and Liberia.

32. PYTILIA MELBA.

Fringilla melba, Linn. S. N. i. 1766, p. 319, "China"!

Fringilla speciosa, Bodd. Pl. Enl. 1783, pl. 203. fig. 1.

Fringilla elegans, Gm. S. N. i. 1788, p. 912; Vieill. & Oud. Gal. Ois. i. pl. 64.

? *Fringilla formosa*, Lath. Ind. Orn. i. 1790, p. 441, "India"!

Fringille beau marquet, Vieill. Ois. Chant. 1805, p. 49, pl. 25.

Loxigilla elegans, Less. Traité Orn. 1831, p. 444.

Estrelida elegans, Rüpp. Neue Wirb. 1835-40, p. 101.

Estrelida speciosa, Des Murs in Lefebvre's Voy. Abyss. 1845-50, p. 173.

Estrelida melba, Gray & Mitchell, Gen. B. ii. 1849, p. 369.

Pytelia melba, Bp. Consp. i. 1850, p. 461.

Zonogastris elegans, Cab. Mus. Hein. i. 1851, p. 172.

Pytelia citerior, Strickl. Contr. Orn. 1852, p. 151.

Marquetia elegans, Reichb. Singvög. 1861, p. 48, pl. 18. figs. 159, 160.

Zonogastris citerior, Heugl. J. f. O. 1868, p. 19.

Zonogastris melba, Heugl. Orn. N.O.-Afr. 1871, p. 138.

Hab. The whole of Africa south from about 16° N. lat., with the exception of tropical West Africa between the Gaboon and Casamanse.

The northern and southern forms have frequently been separated under the titles of *P. citerior* and *P. melba*, but the characters are not, I consider, sufficiently constant and well marked.

a, ♂. August, Kuro (*Jesse*). *b*, May, Lado (*Emin Bey*). *c*, ♀. October, Bamangwato. *d*, ♂. September, Matabele. *e*, ♂ juv. June. *f*, ♂. December, Damara (*Shelley Mus.*).

33. PYTILIA AFRA.

Fringilla afra, Gm. S. N. i. 1788, p. 905; Vieill. N. D. xii. 1817, p. 243 (type exam.).

Estrelida afra, Gray & Mitchell, Gen. B. ii. 1849, p. 369.

Pytelia afra, Bp. Consp. i. 1850, p. 462.

Pytelia melba, F. & H. Vög. Ostaf. 1870, p. 442 (part.).

Pytelia wieneri, Russ, Gef. Welt. August 1877, p. 317; Forbes, P. Z. S. 1880, p. 40, pl. 47. fig. 2.

Pytelia cinereigula, Cab. Orn. Centralbl. December 1877, p. 182, Mombas (type exam.).

Hab. E. and W. Afr.: Zanzibar Province from Lamu to Dar-es-Salaam, and from Angola to Landana.

a, ♂. March, Landana (*Shelley Mus.*).

34. PYTILIA HYPOGRAMMICA.

Pytelia hypogrammica, Sharpe, Ibis, 1870, p. 56, Fantee (type exam.).

Hab. W. Afr., Niger and Gold Coast.

a, ♀. February, Abokobie in Aguapim (*Shelley*).

35. PYTILIA PHÆNICOPTERA.

Pytilia phænicoptera, Swains. B. W. Afr. i. 1837, p. 203, pl. 16.

Estrelida erythropteron, Less. Echo du Monde Sav. 1844, p. 295, Gambia.

Zonogastris phænicoptera, Heugl. Orn. N.O.-Afr. 1871, p. 622.

Hab. N.E. and W. Afr., Upper White Nile and Senegambia.

36. PYTILIA LINEATA.

Fringilla (Estrelida) lineata, Heugl. Syst. Uebers. 1856, p. 40. no. 401 (no descr.).

Pytelia lineata, Heugl. J. f. O. 1863, p. 17 (orig. descr.).

Zonogastris lineata, Heugl. J. f. O. 1868, p. 21; id. Orn. N.O.-Afr. 1871, p. 623, pl. 19. fig. 1 (head).

Hab. N.E. Afr., Abyssinia.

11. LAGONOSTICTA.

1851. *Lagonosticta*, Cab. Mus. Hein. Type.

i. p. 171 *L. rubricata*.

1850. *Amandava*, Bp. Consp. i. p. 459

(part.) *L. amandava* (Linn.).

1868. *Rhodopyga*, Heugl. J. f. O. 1868,

p. 13, pl. 1. fig. 3 *L. rhodopsis*.

1873. *Lychnidospiza*, Heugl. Orn.

N.O.-Afr. App. p. cxxxvii . *L. rara*.

Estrelida shows its affinities to the present genus through its red-rumped, rounded-tailed members, especially when we compare the grey *L. nigricollis* with *E. cærulea*.

Key to the Species.

a. With no black on the head nor throat.

*a*¹. Sides of the head, the throat, and sides of the chest vinous red.

*a*². Bill red, with the culmen black; under tail-coverts not black.

- α^3 . With a pink shade on the red portions;
 crown and mantle ashy brown, with no
 red shade. 37. *L. rufopicta*.
 β^3 . With no pink shade on the red portions;
 entire crown, neck, and mantle washed
 with red 38. *L. senegala*.
 β^2 . Bill slaty black; under tail-coverts black.
 c^3 . Crown and mantle washed with red.
 c^4 . Chest black, with only the sides of the
 crop red; with no trace of white spots
 on the sides of the chest 39. *L. rara*.
 d^4 . Entire chest red; with white spots on the
 sides of the chest. reia.]
 d^3 . Red parts darker and much brighter .. 40. *L. rhodopa-*
 e^5 . Red parts paler and pinker 41. *L. jamesoni*.
 d^3 . Crown and mantle not washed with red.
 f^4 . With a pale base to the lower mandible;
 back and wings brown, and less ashy than
 the crown and back of the neck 42. *L. rubricata*.
 g^4 . With no portion of the bill pale; crown,
 back of neck, back, and wings uniform
 deep slaty brown 43. *L. polionota*.
 β^1 . Entire underparts duller, nearly uniform ashy
 brown, only slightly tinted with red; with no
 trace of white spots on the sides of the chest.. 44. *L. rhodopsis*.
 b . With the sides of the head and upper throat black.
 h^1 . Black of head and throat surrounded by red.
 h^2 . Black of crown confined to the forehead; chest
 red, with no white spots on the sides 45. *L. vinacea*.
 i^2 . Front half of crown and lower chest black;
 with white spots on sides of the chest. 46. *L. larvata*.
 i^1 . Black of head surrounded by grey; forehead,
 crown, mantle, and breast uniform grey; with
 white spots on the sides of the chest 47. *L. nigricollis*.

37. LAGONOSTICTA RUFOPICTA.

Estrela rufopicta, Fraser, P. Z. S. 1843, p. 27, Gold Coast; id. Zool. Typ. pl. 51.

Lagonosticta rufopicta, Reichb. Singvög. 1861, p. 19, pl. 4. fig. 38.

Lagonosticta (Estrela) lateritia, Heugl. J. f. O. 1864, p. 251, N.E. Afr.

Pytelia rufopicta, Fisch. J. f. O. 1869, p. 336.

Astrilda rufopicta, Hartl. Abhandl. nat. Ver. Brem. xii. 1881, p. 103.

Estrela bilineata, Gray, MS. in Brit. Mus., Niger (type exam.).

Hab. N.E. and W. Afr. : Upper White Nile, and from the Niger to Senegambia.

a. March, Cape-Coast Castle (*Shelley*).

38. LAGONOSTICTA SENEGALA.

Sénégal rouge, Briss. Orn. iii. 1760, p. 208, pl. 10. fig. 2.

Fringilla senegala, Linn. S. N. i. 1766, p. 320, ex Briss.

? *Fringilla ignita*, Gm. S. N. i. 1788, p. 906, ex Brown.

Petit Sénégal rouge, Vieill. Ois. Chant. 1805, p. 31, pl. 10.

Fringilla minima, Vieill. N. D. xii. 1817, p. 183, ex Ois. Chant. pl. 10.

Estrela minima, Rüpp. Neue Wirb. 1835-40, p. 101.

Lagonosticta minima, Cab. Mus. Hein. i. 1851, p. 172.

Lagonosticta ignita, Reichb. Singvög. 1861, p. 18, pl. 4. fig. 36.

Lagonosticta senegala, Reichb. t. c. fig. 37.

Estrela senegala, Hartl. Orn. W.-Afr. 1857, p. 143.

Pytelia minima, Finsch, Trans. Z. S. vii. 1869, p. 267.

Lagonosticta russi, Reichen. J. f. O. 1875, p. 453 (type exam.).

Estrela rueppelli, Gray, MS. in Brit. Mus. (type exam.).

Hab. N.E., E., and W. Afr. The whole of E. Africa from 17° N. lat. to Durban in Natal, Damara, Loango Coast, Niger, Casamanse, and Senegambia.

39. LAGONOSTICTA RARA.

Lagonosticta vel Estrela melanogastra, Heugl. (nec Swains.) J. f. O. 1863, p. 273, Djur and Kosango.

Habropyga rara, Antin. Cat. 1864 (March), p. 72.

Estrela vel Habropyga hypomelas, Heugl. J. f. O. 1864 (May), p. 252.

Rhodopyga hypomelas, Heugl. J. f. O. 1868, p. 13, pl. 1. fig. 4.

Rhodopyga rara, Salvad. Att. R. Ac. Tor. 1870, p. 742.

Habropyga hypomelæna, Heugl. Orn. N.O.-Afr. 1871, p. 611.

Lychnidospiza melanogastra, Heugl. Orn. N.O.-Afr. 1873, p. cxxxvii.

Hab. N.E. and W. Afr. : Upper White Nile, and Lukoja on Niger. Between 5° and 10° N. lat., but not recorded to the west of 5° E. long., nor east of 35° E. long.

a, ♂. August, Lukoja on Niger (*Forbes, Brit. Mus.*).

40. LAGONOSTICTA RHODOPAREIA.

Lagonosticta rhodopareia, Heugl. J. f. O. 1868, p. 16, Bogos.

Estrela rhodopareia, F. & H. Vög. Ostaf. 1870, p. 446, note.

Lagonosticta rubricata, Heugl. Orn. N.O.-Afr. 1871, p. 615.

? *Estrela rubricata*, Reichen. J. f. O. 1877, p. 229, Loango Coast.

Lagonosticta polionota, Cab. (nec Shelley) J. f. O. 1878, p. 229, Mombas; Shelley, P. Z. S. 1881, p. 588, Dar-es-Salaam.

? *Lagonosticta rubricata*, Bocage, Orn. Angola, 1881, p. 362, Landana.

Habropyga ænochroa, Hartl. Orn. Centralbl. 1882, p. 91, Central Afr. (type exam.).

Hab. N.E., E., and ? W. Afr. Southward in E. Africa from 21° N. lat. to Dar-es-Salaam; and I expect it is the species referred to above from the Loango Coast and Landana.

a. Dar-es-Salaam (*Kirk, Shelley Mus.*).

41. LAGONOSTICTA JAMESONI.

Lagonosticta jamesoni, Shelley, Ibis, 1882, p. 355, Matabele.

Hab. S. Africa, Matabele.

a, ♂. December, Tatin R. *b*, ♀. August, Umvuli R. (*Jameson, Shelley Mus. types*).

42. LAGONOSTICTA RUBRICATA.

Fringilla rubricata, Licht. Verz. Doubl. 1823, p. 27, Caffraria.

Estrela rubricata, Gray & Mitchell, Gen. B. ii. 1849, p. 368.

Lagonosticta rubricata, Cab. Mus. Hein. i. 1851, p. 171.

Hab. S. Africa : Transvaal, Natal, and Cape Colony.

The references recording this species from Loango Coast and Landana I have referred to *L. rhodopareia*, as I fancy it is more probably the bird intended.

a. May. *b.* August, Natal (*Shelley Mus.*).

43. LAGONOSTICTA POLIONOTA.

Lagonosticta polionota, Shelley, Ibis, 1873, p. 141, Fantee.

Hab. W. Africa, Gold Coast.

a. March, Cape-Coast Castle (*Shelley, type*).

44. LAGONOSTICTA RHODOPSIS.

Estrela rhodopsis, Heugl. J. f. O. 1863, p. 166, Gazal river.

Rhodopyga rhodopsis, Heugl. J. f. O. 1868, p. 13, pl. 1. fig. 3.

Habropyga rhodopsis, Heugl. Orn. N.O.-Afr. 1871, p. 610.

Hab. N.E. Africa, Upper White Nile district.

45. LAGONOSTICTA VINACEA.

Estrela vinacea, Hartl. Orn. W.-Afr. 1857, p. 143, Casamanse.

Lagonosticta vinacea, Reichb. Singvög. 1861, p. 18.

Hab. W. Africa : Casamanse, Senegambia.

46. LAGONOSTICTA LARVATA.

Anadina larvata, Rüpp. Neue Wirb. 1835-40, pp. 97, 101, pl. 36. fig. 1, Simen.

Habropyga larvata, Bp. Consp. i. 1870, p. 461.

Lagonosticta larvata, Heugl. J. f. O. 1868, p. 16.

Hab. N.E. Africa, Abyssinia.

47. LAGONOSTICTA NIGRICOLLIS.

Estrela nigricollis, Heugl. J. f. O. 1863, p. 273.

Habropyga larvata, Antin. Cat. 1864, p. 71, fide Salvad. Att. R. Ac. Tor. 1870, p. 742.

Lagonosticta nigricollis, Heugl. J. f. O. 1868, p. 17, pl. 1. fig. 1.

Hab. N.E. and W. Africa : Upper White Nile district, and Lukoja on Niger.

a, ♂. Lukoja, August (*Forbes, Brit. Mus.*).

12. ESTRELDA.

Type.

1815. *Bengalis*, Rafinesque, Analyse, 1815,
p. 68 (no descr.) ?
1827. *Estrela*, Swains. Zool. Journ. iii.
1827, p. 349 *E. astrild.*
1831. *Loxigilla*, Less. Traité Orn. p. 443
(part.) ?
1847. *Habropyga*, Cab. Arch. f. Naturg.
1847, pt. i. p. 331 *E. astrild.*
1850. *Granatina*, Bp. Consp. i. p. 458 . . . *E. granatina.*
1850. *Neisna*, Bp. t. c. p. 460 *E. subflava.*
1851. *Sporæginthus*, Cab. Mus. Hein. i. p. 170 *E. subflava.*
1851. *Uræginthus*, Cab. t. c. p. 171 . . . *E. granatina.*
1861. *Mariposa*, Reichb. Singvög. p. 6, pl. 1.
figs. 1, 2 *E. angolensis.*
1861. *Astrilda*, Reichb. t. c. p. 8 *E. granatina.*
1861. *Coccopygia*, Reichb. t. c. p. 23. . . . *E. quartini.*
1861. *Melpoda*, Reichb. t. c. p. 26, pl. 7.
figs. 62-64 *E. melpoda.*
1861. *Brunhilda*, Reichb. t. c. p. 48, pl. 18.
fig. 158 *E. erythronota.*
1873. *Haplopygia*, Heugl. Orn. N.O.-Afr.
1873, App. p. cxxxvii. *E. astrild.*

The division Estreldæ I end with *Ortygospiza*, which, in some respects, forms a connecting link with the division Viduæ, which I begin with *Hypochera*.

Bengalis, Rafin., was probably intended for this genus; but no characters were given, and no type ever indicated. *Habropyga* was proposed as an amendment for *Estrela*, but is, I consider, inadmissible. I may point out that if this genus is broken up as has been frequently done, *Granatina*, Bp., has priority over *Uræginthus*, Cab.

I have included in this genus three species of which I know nothing—55. *Pytelia capistrata*, Hartl.; 58. *Estrela salvatieri*, Rochebrune; and 66. *Fringilla viridis*, Vieill.

Key to the Species.

- a. Rump and upper tail-coverts never blue.
- a¹. Bill: both mandibles blackish. Rump and upper tail-coverts red.
- a². General plumage grey. No black on head. Tail shorter.
- a³. Tail red 48. *E. cærulescens*.
- b³. Tail black.
- b⁴. Abdomen and under tail-coverts blacker..... 49. *E. perreini*.
- c⁴. Abdomen and under tail-coverts greyer Subsp. 50. *E. incana*.
- b². General plumage not so grey. With some black on the head. Tail longer.
- d³. Crown ashy brown. Sides of the head black.
- d⁴. Under tail-coverts black 51. *E. erythronota*.
- e⁴. Under tail-coverts white 52. *E. charmosina*.
- e³. Crown black. Sides of the head not black.
- f⁴. Mantle grey, barred with black. Flanks red 53. *E. atricapilla*.
- g⁴. Mantle olive-brown. No red on breast 54. *E. nonnula*.
55. *E. capistrata*.
- b¹. Bill: upper mandible black, lower one red. Rump and upper tail-coverts red.
- k². Abdomen and under tail-coverts less yellow 56. *E. dufresnii*.
- k³. Sides of the head and upper throat black *E. dufresnii*, ♂.
- i³. Sides of the head grey, upper throat white *E. dufresnii*, ♀.
- i². Abdomen and under tail-coverts yellower.
- j³. Rump redder. Throat whiter 57. *E. quartinia*.
- k³. Rump more orange-red. Throat greyer 58. *E. salvatieri*.
- c⁴. Bill: both mandibles orange-red.
- l². With no crimson band through the eye, contrasting with the cheeks and ear-coverts. Rump and upper tail-coverts red.
- l³. Sides of the head grey 59. *E. paludicola*.
- m³. Sides of the head orange 60. *E. melpoda*.
- m². With a crimson band through the eye,

contrasting strongly with the surrounding plumage.

*n*³. Rump and upper tail-coverts brown, finely barred with black. Under tail-coverts black.

*n*⁴. With no red shade on any of the upper parts, under tail-coverts entirely black..... 61. *E. astrild*.

*o*⁴. Upper parts, especially the rump, slightly shaded with red. The throat, flanks, and under tail-coverts also washed with red. Subsp. 62. *E. rhodopyga*.

*o*³. Rump and upper tail-coverts uniform black. Under tail-coverts white.

*p*⁴. Smaller. Breast shaded with pink. Culmen and gonys not black 63. *E. cinerea*.

*q*⁴. Larger. Breast not shaded with pink. Culmen and gonys black 64. *E. rufibarba*.

*p*³. Rump and upper and under tail-coverts red. Breast yellow, with the sides olive barred with yellow 65. *E. subflava*.

66. *E. viridis*.

b. Rump and upper tail-coverts blue.

*r*¹. Blue portions of plumage ultramarine.

*r*². Upper throat black. Breast cinnamon .. 67. *E. granatina*.

*s*². Upper throat cinnamon. Breast blue.... 68. *E. ianthinogastra*.

*s*¹. Blue portion of the plumage verditer blue.

Throat the same colour as the rump 69. *E. angolensis*.

48. ESTRELLA CÆRULESCENS.

Bengali gris-bleu, Vieill. Ois. Chant. 1805, p. 27, pl. 8.

Fringilla cærulescens, Vieill. N. D. xii. 1817, p. 176.

Estrella cærulescens, Swains. B. W. Afr. i. 1837, p. 195.

Lagonosticta cærulescens, Cab. Mus. Hein. i. 1851, p. 171.

Habropyga cærulescens, Reichb. Singvög. 1861, p. 12, pl. 2.

figs. 14, 15.

Habropyga fimbriata, Reichb. t. c. pp. 12, 49, pl. 18. figs. 165, 166.

Hab. W. Afr., Casamanse and Senegambia.

49. ESTRELLA PERREINI.

Fringilla perreini, Vieill. N. D. xii. 1817, p. 179, Congo.

Estrella melanogastra, Swains. B. W. Afr. i. 1837, p. 194.

Estrela perreini, Hartl. Orn. W.-Afr. 1857, p. 143, "Casamanse (Verr.)" ? ; ? Rochebrune, Faun. Sénégal. 1884, p. 254, nec pl. 21. fig. 2.

Pytelia perreini, F. & H. Vög. Ostaf. 1870, p. 447, note.

Habropyga perreini, Reichen. J. f. O. 1877, p. 29, Loango.

Hab. W. Afr., Congo and Loango Coast.

The occurrence of this species at Casamanse and Senegambia is fairly open to doubt. The figure referred to this bird by Rochebrune (*l. c.*) cannot apply to this species, for it differs in having the upper back red, like the rump, instead of grey, and the lower mandible pink instead of slaty grey. If it is a correct picture, the specimen from which it was taken must belong to a species new to science.

50. Subsp. ESTRELA INCANA.

Estrela incana, Sundev. Œfv. K. Vet.-Ak. Förh. Stockh. 1850, p. 98, Caffraria.

Habropyga natalensis, Cab. Mus. Hein. i. 1851, p. 170, Natal.

Estrela cærulescens, Licht. Nomencl. 1857, p. 48 (part), Mosambique.

Habropyga incana, Reichb. Singvög. 1861, p. 12.

Fringilla cærulescens, Bianc. (nec Swains.) Spec. Zool. Mosamb. fasc. xviii. 1867, p. 326.

Pytelia incana, F. & H. Vög. Ostaf. 1870, p. 446.

Hab. S.E. Afr., from Mosambique to Natal.

a, ♂. October, Durban (*Shelley Mus.*).

51. ESTRELA ERYTHRONOTA.

Astrild à moustaches noires, Vieill. Ois. Chant. 1805, p. 37, pl. 14.

Fringilla erythronota, Vieill. N. D. xii. 1817, p. 182.

Estrela lipiniana, Smith, Rep. Exped. Expl. Centr. Afr. 1836, p. 49, N.E. of Kurrichaine.

Estrela erythronota, Gray & Mitchell, Gen. B. ii. 1849, p. 368, pl. 90. fig. 1.

Habropyga erythronota, Cab. Mus. Hein. i. 1851, p. 169.

Estrela lipiniana, Strickl. & Sclat. Contr. Orn. 1852, p. 150.

Hab. E. and S. Afr. : southward from Ngaruk in Masai-land, about 4° S. lat., to the Transvaal, and from thence to Great Namaqua, Damara, and Lake Ngami.

a, ♂. November, Omaruru. *b*, ♂. July, Objimbinque. *c*, ♀. July, Damara (*Shelley Mus.*). The female only differs in being slightly duller than the male.

52. ESTRELD A CHARMOSINA.

Habropyga charmosina, Reichen. J. f. O. 1881, p. 333, Berbera.

Hab. E. Afr. : Berbera, about 10° N. lat.

53. ESTRELD A ATRICAPILLA. (Plate IX. fig. 1.)

Estrellda atricapilla, J. & E. Verr. Rev. et Mag. Zool. 1851, p. 421, Gaboon.

Hab. W. Afr. : confined to the Gaboon.

54. ESTRELD A NONNULA.

Astrilda nonnula, Hartl. J. f. O. 1883, p. 435, Kudurma (Emin Bey).

Hab. E. Afr. : Upper White Nile, south of 5° N. lat.

55. ESTRELD A CAPISTRATA.

Pytelia capistrata, Hartl. J. f. O. 1861, p. 259, Bissao.

Hab. W. Afr., Bissao.

Note. This species is only known to me by Dr. Hartlaub's following original description :—"Supra olivaceo-viridis; capite, collo corporeque subtus cinereis; gula circumscripte nigra; rostro nigro. Long. circa 4"."

56. ESTRELD A DUFRESNII.

Fringilla dufresnii, Vieill. N. D. xii. 1817, p. 181, Hab. ?

Fringilla erythronotus, Temm. MS., Vieill. t. c. p. 243, Caffraria.

Fringilla melanotis, Temm. Pl. Col. 1823, pl. 221. fig. 1.

Estrellda neisna, Licht. Nomencl. 1854, p. 48 (no descr.), Caffraria.

Estrellda melanotis, Gray & Mitchell, Gen. B. ii. 1849, p. 368.

Estrellda dufresnii, Gray & Mitchell, t. c. p. 369.

1



2



J.G. Keulemans del.

Hanhart imp.

1. ESTRELLA ATRICAPILLA.
2. PYROMELANA AUREA.

Estrela (*Neisna*) *dufresnii*, Bp. Consp. i. 1850, p. 460.

Estrela melanogenys, Sundev. Œfv. K. Vet.-Ak. Förh. Stockh. 1850, p. 97, Natal.

? *Estrela quartinia*, Bocage, Orn. Angola, 1881, p. 360, Huilla, Biballa.

Ortygospiza dufresnii, Butler, Feilden, & Reid, Zoologist, 1882, p. 300.

Hab. S. Afr.; south of the Zambesi and Quanza rivers.

a, ♂. October, Durban. *b*, ♂. January, Knysna (*Shelley Mus.*).

57. ESTRELD A QUARTINIA.

Estrela (*Neisna*) *quartinia*, Bp. Consp. i. 1850, p. 461, Abyssinia.

Fringilla (*Estrela*) *flaviventris*, Heugl. Syst. Uebers. 1856, p. 40. no 399.

Estrela quartinia, Hartl. Orn. W.-Afr. 1857, p. 142, note.

Coccopygia quartinia, Reichb. Singvög. 1861, p. 23.

Estrela ernesti, Heugl. J. f. O. 1862, p. 29, Keren.

Habropyga ernesti, Heugl. Orn. N.O.-Afr. 1871, p. 607, pl. 18. fig. *b*.

Habropyga quartinia, Heugl. t. c. p. 608.

Coccopygia quartinii, Heugl. t. c. App. 1873, p. cxxxvii.

Coccopygia ernesti, Heugl. l. c.

Hab. N.E. and W. Afr.; from Abyssinia to Senegambia.

58. ESTRELD A SALVATIERI.

Estrela salvatieri, Rochebrune, Faun. Sénégalamb. 1884, p. 252, pl. 21. fig. 1.

Hab. W. Afr., Senegambia.

E. salvatieri is only known to me from M. Rochebrune's description and figure.

59. ESTRELD A PALUDICOLA.

Estrela paludicola, Heugl. J. f. O. 1863, p. 166, Gazal river.

Habropyga paludicola, Heugl. J. f. O. 1868, pl. 1. fig. 2; Cab. J. f. O. 1885, p. 464, Angola (spec. exam.).

Hab. N.E. and W. Afr. Upper White Nile from the Gazal river to Lado, between 5° and 10° N. lat., and Angola.

a. January, Lado (*Emin Bey, Shelley Mus.*).

60. ESTRELDIA MELPODA.

Bengali à joues orangées, Vieill. Ois. Chant. 1805, p. 26, pl. 7.

Fringilla melpoda, Vieill. N. D. xii. 1817, p. 177.

Estrelidia melpoda, Gray & Mitchell, Gen. B. ii. 1849, p. 369.

Fringilla lippa, Licht. MS. Mus. Berol., fide Bp. Consp. i. 1850, p. 460.

Melpoda lippa, Reichb. Singvög. 1861, p. 26, pl. 7. figs. 62-64.

Habropyga melpoda, Cab. J. f. O. 1885, p. 464, Angola.

Hab. W. Afr., from Angola to Senegambia.

a. January, Cape-Coast Castle (*Shelley*).

61. ESTRELDIA ASTRILD.

Loxia astrild, Linn. S. N. i. 1766, p. 303.

Astrild, Vieill. Ois. Chant. 1805, p. 35, pl. 12.

Fringilla astrild, Vieill. N. D. xii. 1817, p. 232.

Fringilla undulata, Pall. "Adumbrat. p. 143," fide Giebel.

Estrelidia astrild, Swains. Zool. Journ. iii. 1827, p. 349.

Estrelidia caerulescens, Rüpp. (nec V.) Neue Wirb. 1835-40, p. 101.

Estrelidia rubriventris, Des Murs, in Lefebvre's Voy. Abyss. 1845-50, p. 172.

Habropyga astrild, Cab. Mus. Hein. i. 1851, p. 169.

Estrelidia occidentalis, Fraser, in Jard. Contr. Orn. 1851, p. 156.

Astrilda undulata, Reichb. Singvög. 1861, p. 9, pl. 2. figs. 7-9.

Astrilda rubriventris, Reichb. t. c. p. 10, pl. 2. fig. 12.

Estrelidia undulata, Reichen. J. f. O. 1877, p. 29.

Astrilda astrild, Holub & Pelz. Beitr. Orn. Südafr. 1882, p. 126.

Habropyga minor, Cab. J. f. O. 1878, p. 229, Voi river in E. Afr.

Hab. The whole of Africa south of about 16° N. lat. and the surrounding islands, as the Comoro, Madagascar, Réunion, Mauritius, St. Helena, Fernando Po.

a, ♂. May, Lado. *b*. June. *c*. July, Natal. *d*. January, Ceres, in Cape Colony. *e*. April, St. Helena (*Shelley Mus.*).

Subsp. 62. *ESTRElda RHODOPYGA*.

? *Astrild à ventre-rouge*, Vieill. Ois. Chant. 1805, p. 36, pl. 13 (cage-bird).

? *Fringilla rubriventris*, Vieill. N. D. xii. 1817, p. 184, Senegal.

? *Estrelda rubriventris*, Gray & Mitchell, Gen. B. ii. 1849, p. 369.

Estrelda rhodopyga, Sundev. Œfv. K. Vet.-Ak. Förh. Stockh. 1850, p. 126, Senaar.

Estrelda rhodoptera, "Sundev. MS. Mus. Holm.," fide Bp. Consp. i. 1850, p. 459.

Habropyga rhodoptera, Cab. Mus. Hein. i. 1851, p. 169, note.

Habropyga "frenata, Ehr. MS.," Cab. l. c.

Estrelda effrenata, Licht. Nomencl. 1854, p. 48.

Estrelda leucotis, Heugl. J. f. O. 1862, p. 29, Keren.

Estrelda frenata, Heugl. J. f. O. 1868, p. 8.

Habropyga rhodopyga, Finsch, Trans. L. S. vii. 1869, p. 266.

Hab. N.E. and W. Afr. In N.E. Africa, Abyssinia and Senaar; and in W. Africa, Landana and ? Senegal.

a. Lado. *b*. February, Landana (*Shelley Mus.*).

63. *ESTRElda CINEREA*.

Bengali cendré, Vieill. Ois. Chant. 1805, p. 25, pl. 6.

Fringilla cinerea, Vieill. N. D. xii. 1817, p. 176.

? *Fringilla troglodytes*, Licht. Verz. Doubl. 1823, p. 26.

Estrelda cinerea, Rüpp. Neue Wirb. 1835-40, p. 101.

? *Estrelda troglodytes*, Bp. Consp. 1850, p. 459.

Habropyga cinerea, Cab. Mus. Hein. i. 1851, p. 169.

Astrilda cinerea, Reichb. Singvög. 1862, p. 9, pl. 2. figs. 10, 11.

Astrilda nigricauda, Reichb. t. c. p. 10, pl. 6. figs. 55, 56.

Estrelda melanopygia, Heugl. J. f. O. 1864, p. 251.

Hab. N.E. and W. Afr. In N.E. Africa from 15° to 5° N. lat., and in W. Africa from Gaboon to Senegambia.

64. ESTRELLA RUFIBARBA.

Fringilla rufibarba, Ehr. MS. in Mus. Berol., Arabia.

Fringilla buccalis, Ehr. MS. in Mus. Berol., Arabia.

Habropyga "*rufibarba*," Ehr., Cab. Mus. Hein. i. 1851, p. 169.

Estrella rufibarba, Heugl. J. f. O. 1868, p. 7.

Hab. S. Arabia and Abyssinia.

a. January, Lahej, in Arabia (*Brit. Mus.*).

65. ESTRELLA SUBFLAVA.

Fringilla subflava, Vieill. N. D. xxx. 1819, p. 575.

Fringilla sanguinolenta, Temm. Pl. Col. 1823, pl. 221. fig. 2.

Estrella sanguinolenta, Swains. B. W. Afr. i. 1837, p. 190.

Amadina sanguinolenta, Gray & Mitchell, Gen. B. ii. 1849, p. 370, pl. 30. figs. 2, 3.

Estrella (*Neisna*) *subflava*, Bp. Consp. i. 1850, p. 460.

Sporæginthus subflava, Cab. Mus. Hein. i. 1851, p. 170.

Estrella subflava, Hartl. Orn. W.-Afr. 1857, p. 144.

Sporæginthus miniatus, Heugl. J. f. O. 1863, p. 167, Abyssinia.

Estrella subflava orientalis, Heugl. J. f. O. 1868, p. 11.

Pytelia subflava, Russ, J. f. O. 1869, p. 78.

Habropyga subflava, Heugl. Orn. N.O.-Afr. 1871, p. 609.

Ortygospiza subflava, Butler, Feilden, & Reid, Zoologist, 1882, p. 300.

Pytelia sanguinolenta, Böhm, J. f. O. 1885, p. 69, Central Afr.

Hab. N.E., E., Central, S., and W. Afr. South from 15° N. lat. it ranges from the White Nile to the Gazal river, and has been met with in Central Africa towards Tanganyika. In South Africa it occurs in the Transvaal and Natal, and in West Africa from the Niger to Senegambia.

a. September. *b.* December, Natal (*Shelley Mus.*).

66. ESTRELLA VIRIDIS.

Bengali vert, Vieill. Ois. Chant. 1805, p. 22, pl. 4.

Fringilla viridis, Vieill. N. D. xii. 1817, p. 180.

Estrella viridis, Bp. Consp. i. 1850, p. 460; Rochebrune, Faun. Sénéga mb. 1884, p. 251.

Hab. W. Afr., Senegambia.

I have never seen a specimen, and have therefore merely entered the name in my "key to the genus." According to Vieillot's figure, *l. c.*, it has the bill and feet red; a red band through the eyes as in *E. astrild*; back, wings, and tail olive; cheeks, throat, and entire underparts grey, washed with very pale red, rather brighter toward the vent.

M. Rochebrune records it from six localities in Senegambia, but considers it rare. I can find no other instance of its having been met with since Vieillot's time.

67. ESTRELLA GRANATINA.

Fringilla granatina, Linn. S. N. i. 1766, p. 319.

Loxia granatina, Daud. Traité Orn. ii. 1800, p. 446.

Granadin, Vieill. Ois. Chant. 1805, p. 40, pls. 17 ♂, 18 ♀.

Estrella granatina, Chapm. Trav. S. Afr. ii. App. 1848, p. 402.

Estrella (Granatina) granatina, Bp. Consp. i. 1850, p. 458.

Uræginthus granatinus, Cab. Mus. Hein. i. 1851, p. 171.

Mariposa granatina, Reichb. Singvög. 1861, p. 7, pl. 1. figs. 4, 5.

Hab. S. Afr., from Matabele and the Transvaal to Damara and Lake Ngami.

This species has been recorded by Hartlaub (Orn. W.-Afr. p. 144) from Angola (*Henderson*), and I have a note of a specimen from Angola (*Linnier*); but according to Bocage (Orn. Angola, p. 353) it is not known to him from either Angola or Benguela. In E. Africa it appears to be entirely replaced by *Estrella ianthinogastra*, and I suspect that to that species belongs the *Uræginthus granatinus*, Rochebrune (Faun. Sénégal. p. 255). As there is a large trade with Senegal in cage-birds, this species may have been naturalized there, but cannot, I think, ever have been indigenous.

68. ESTRELLA IANTHINOASTRA.

Uræginthus granatinus, Cab. (nec Linn.) J. f. O. 1878, p. 229 (♂ or ♀ juv.), E. Afr.; ? Rochebrune, Faun. Sénégal. 1884, p. 255, Gambia, Casamance.

Uræginthus ianthinogaster, Reichen. J. f. O. 1879, p. 326, pl. 2. figs. 1, 2 (not good), Massa.

Hab. E. and ? W. Afr.: from Somali to Little Aruscha; possibly Gambia and Casamanse in W. Africa.

69. ESTRELDA ANGOLENSIS.

Blue-bellied Finch, Edw. Nat. Hist. B. 1743, pl. 131 (good), Angola.

Fringilla angolensis, Linn. S. N. i. 1766, p. 323, ex Edw.

Fringilla bengalus, Linn. loc. cit.

Loxia bengalus, Daud. Traité, ii. 1800, p. 435.

Loxia cyanogastra, Daud. loc. cit.

Maripose, Vieill. Ois. Chant. 1805, p. 23, pl. 5.

Estrela bengala, Less. Traité Orn. 1831, p. 444.

Estrela mariposa, Less l. c.

Estrela phænicotis, Swains. B. W. Afr. i. 1837, p. 192, pl. 14.

Estrela (Granatina) angolensis, Bp. Consp. i. 1850, p. 458.

Uræginthus phænicotis, Cab. Mus. Hein. i. 1851, p. 171.

Mariposa phænicotis, Reichb. Singvög. 1861, p. 6, pl. 1. figs. 1, 1 a, 1 b, 2.

Pytelia phænicotis, F. & H. Vög. Ostaf. 1870, p. 447.

Mariposa cyanogastra, Gurney in Anders. B. Damara, 1872, p. 179.

Estrela cyanogastra, Sharpe, P. Z. S. 1873, p. 717.

Astrilda phænicotis, Hartl. Abhandl. nat. Ver. Brem. vii. 1881, p. 103.

Uræginthus cyanogastra, Sharpe's ed. Layard, B. S. Afr. 1884, pp. 473, 850.

Hab. The whole of Africa south from about 15° N. lat.

The South-African birds form a race in which the ear-coverts are never red, but I can find no character for distinguishing the females. If these two races were separated, the southern bird should be referred to *Fringilla angolensis*, Linn., and the northern one to *Fringilla bengalensis*, Linn., which latter name would have to be superseded by *Estrela mariposa*, Less., ex Vieill.

a, ♀. July, Bejook. *b*, ♀. June, Sobat. *c*. July, Swazi.
d. September, Matabele (*Shelley Mus.*).

13. ORTYGOSPIZA.

Type.

1850. *Ortygospiza*, Sundev. Cefv. af Vet.-Ak.

Förh. Stockh. 1850, p. 98 *O. polyzona*.

I have not been able to examine a sufficient number of good specimens from N.E. Africa, and suspect that the two N.E.-African forms will be found to differ from the S.-African bird; if so, the species with the white round the eye will stand as *Ortygospiza fuscocrissa*, Heugl., for *Fringilla multizona* is nothing but an error in Des Murs's quotation from Temminck. The white circle round the eye is, however, no reliable character.

Key to the Species.

- a*. Chin white and a white band round the eye. 70. *O. polyzona*.
b. With no white on the head 71. *O. atricollis*.

70. ORTYGOSPIZA POLYZONA.

Fringilla polyzona, Temm. Pl. Col. 1823, pl. 221. fig. 3.

? "*Fringilla multizona*, Temm." (error), Des Murs, in Lefebvre's Voy. Abyss. 1840-45, p. 117.

? *Estrelda polyzona*, Des Murs, tom. cit. p. 173.

? *Amadina polyzona*, Rüpp. Syst. Uebers. 1845, p. 77.

Ortygospiza polyzona, Sundev. Cefv. af Vet.-Ak. Förh. Stockh. 1850, p. 98.

? *Ortygospiza fuscocrissa*, Hartl. J. f. O. 1863, p. 18, Dembea, Tigré.

? *Ortygospiza atricollis*, Heugl. Orn. N.O.-Afr. 1871, p. 598 (part.).

Hab. (N.E.?) S. and W. Afr. In Abyssinia and Shoa this, or probably a closely allied species, is found. It has not been recorded from E. Africa, and in S. and W. Africa it has only been mentioned from Matabele, Transvaal, Natal, and Angola.

a, ♀. June. *b*, ♀. October, Newcastle. *c*, ♀. July, Pinetown, Natal (*Shelley Mus.*). In specimen *c* there is no

white on one side of the head, and only a few white feathers near the eye on the other side, otherwise the specimen is apparently adult.

71. ORTYGOSPIZA ATRICOLLIS.

Fringilla atricollis, Vieill. Enc. Méth. 1823, p. 990, Senegal.

Amadina lunulata, Temm. MS., Senegal, fide Hartl. Orn. W.-Afr. 1857, p. 148.

Amadina polyzona, Hartl. tom. cit. p. 148, part. (nec descr.).

Ortygospiza atricollis, Hartl. tom. cit. p. 274.

Hab. N.E. and W. Afr.: Bongo, Upper White Nile, Gaboon, Cape Lopez, Casamanse, and Senegal.

14. HYPOCHERA.

Type.

1850. *Hypochera*, Bp. Consp. i. p. 450 . . . *H. chalybeata*.

I consider the present genus to contain only one species, varying slightly in size and considerably in the gloss, which shades from green, blue, and purple to almost dull black; but these slight differences do not appear to have any relation to their geographical distribution.

72. HYPOCHERA CHALYBEATA.

Black Linnet, Edwards, Gleanings, iii. 1764, p. 323, pl. 362. fig. 1 (good, blue gloss).

Fringilla chalybeata, P. L. S. Müll. S. N. Suppl. 1776, p. 166 (blue gloss).

Fringilla nitens, Gm. S. N. i. 1788, p. 909 (blue gloss).

Fringilla ultramarina, Gm. tom. cit. p. 927 (blue gloss).

Comba-sou, Vieill. Ois. Chant. 1805, p. 44, pl. 21 (blue gloss).

Loxigilla nitens, Less. Traité Orn. 1831, p. 444.

Amadina nitens, Swains. B. W. Afr. i. 1837, p. 199.

Fringilla funerea, De Tarragon, Rev. Zool. 1847, p. 180 (purple gloss).

Philaterus nitens, Strickl. P. Z. S. 1850, p. 218.

Hypochera nitens, Bp. Consp. i. 1850, p. 450.

Hypochera ultramarina, Bp. loc. cit.

Loxigilla melas, Verr. MS., fide Bp. loc. cit.

Vidua ultramarina, Licht. Nomencl. 1854, p. 49.

Hypochera ænea, Hartl. J. f. O. 1854, p. 115, Senegal (green gloss).

Hypochera chalybeata, Sharpe, Cat. Afr. B. 1871, p. 64.

Hypochera nigerrima, Sharpe, P. Z. S. 1871, p. 133, Angola (purple gloss).

Hypochera purpurascens, Reichen. J. f. O. 1883, p. 221, Usagua, Lindi (purple gloss).

Hab. The whole of Africa south from about 16° N. lat.

a. February. *b.* April, Natal (*Shelley Mus.*).

15. VIDUA.

Type.

1800. *Vidua*, Cuv. Anat. Comp. Table Ois. . *V. principalis*.

1850. *Videstrella*, Lafresn. Rev. et Mag.

Zool. 1850, p. 325 *V. regia*.

1850. *Steganura*, Reichb. Syst. Nat. pl. 76 . *V. paradisea*.

1850. *Tetrænura*, Reichb. tom. cit. pl. 78 . . *V. regia*.

1882. *Linura*, Reichb. Orn. Centralbl. 1882,

p. 91 *V. fischeri*.

The genus *Vidua* appears to me to differ from *Hypochera* only in having the two or four central tail-feathers much elongated. If I divided the genus *Vidua*, I should require five genera for the reception of the six species.

Vidua hypocherina and *V. nitens*, of which I have examined the types, are identical.

V. principalis was divided by Dr. Hartlaub into two species, one with the chin white, and the other with it black; but every intermediate form, from one black feather to twenty or more on the chin, I have met with.

V. superciliosa is only known to me by the description and fine illustration given by Vieillot from a specimen in Temminck's collection. This species has, I believe, never since been met with. It is the only *Vidua* ever described with only two elongated tail-feathers, and these are white and apparently perfectly similar to those of a Flycatcher of the genus *Tchitrea*. The type is not in the Paris Museum,

and may, I think, have been found to be a made-up bird and destroyed. So much doubt do I feel with regard to this bird, that I think until it is rediscovered, or the type carefully examined, it might with advantage be omitted from the African list.

V. paradisea has generally been divided into two species—the typical race from W. Africa, and *Vidua verreauxi*, Cass., from E. and S. Africa; but their differences I consider of too trivial a nature to be recognized with any advantage. The only character I can find for *V. verreauxi* is the absence of any chestnut shade on the hind neck. There is no constant difference in their measurements. In six specimens in the British Museum from the Gambia, five have the chestnut shade on the back of the neck, and one is without that shade.

Key to the Species.

a. Bill red.

*a*¹. Elongated tail-feathers of moderate breadth throughout their length. Breast black or white in adults.

*a*². With four elongated tail-feathers, black.

*a*³. Entire plumage glossy greenish black . . 73. *V. hypocherina*.

*b*³. Underparts white 74. *V. principalis*.

*b*³. With two elongated tail-feathers, white . . 75. *V. superciliosa*.

*b*¹. Elongated tail-feathers very narrow. Underparts buff.

*c*². Four centre tail-feathers white and equally narrow throughout their length. Crown buff. Neck and sides of the head black . . 76. *V. fischeri*.

*d*². Centre tail-feathers black and extremely narrow, widening out near their ends. Crown black. Neck, ear-coverts, and throat buff 77. *V. regia*.

b. Bill black. Four elongated tail-feathers very broad, narrowing towards their ends. Entire head and throat black 78. *V. paradisea*.

73. *VIDUA HYPOCHERINA*.

Vidua hypocherina, Verr. Rev. et Mag. Zool. 1856, p. 260, pl. 16 (bad), W. Afr. (type exam.).

Vidua splendens, Reichen. Orn. Centralbl. 1879, p. 180,

Kiparaja (type exam.) ; Forbes, P. Z. S. 1880, p. 475, pl. 47. fig. 1 (good).

Hab. E. and W. Africa : E. Africa between 1° and 7° S. lat. from Kiparaja to Ugogo ; and in W. Africa, Casamance and Gambia.

74. *VIDUA PRINCIPALIS.*

Long-tailed Sparrow, Edwards, Nat. Hist. B. 1760, fig. 2 (good, in moult with long tail, brown plumage).

Emberiza serena, Linn. S. N. i. 1766, p. 312 (not in full plumage).

Emberiza vidua, Linn. loc. cit. (in full plumage).

Emberiza principalis, Linn. loc. cit., ex Edw.

Veuve Dominicaine, Vieill. Ois. Chant. 1805, p. 61, pl. 36 (good, white chin).

Vidua principalis, Cuv. Règne An. i. 1817, p. 388.

Vidua serena, Cuv. loc. cit.

Fringilla serena, Vieill. N. D. xii. 1817, p. 216.

Fringilla principalis, Vieill. tom. cit. p. 219.

Vidua erythrorhyncha, Swains. B. W. Afr. i. 1837, p. 176, pl. 12 (good, black chin).

Estrelda serena, Des Murs, in Lefebvre's Voy. Abyss. 1845-50, p. 113.

Videstrella serena, Lafr. Rev. et Mag. Zool. 1850, p. 325.

? *Vidua fuliginosa*, Licht. Nomencl. 1854, p. 49.

Vidua decora, Hartl. Ibis, 1862, p. 240, Angola (type exam., black chin).

Hab. Africa, generally south from about 16° N. lat.

a, ♂. July, Bejook. *b*, ♂, full plumage. December. *c*, ♂. October, nearly full plumage. *d*, ♂. September, half moult. *e*, ♂. June, full moult, Natal. *f*. March, full moult, Cape-Coast Castle (*Shelley Mus.*).

75. *VIDUA SUPERCILIOSA.*

"*Fringilla superciliosa*, Temm.," Vieill. N. D. xii. p. 216 (ex Temm.), 1817 ; Vieill. & Oud. Gal. Ois. i. 1825, p. 73, pl. 61.

Vidua superciliosa, Griff. ed. Cuv. Règne An. ii. 1829, p. 150.

Videstrella superciliosa, Lafr. Rev. et Mag. Zool. 1850, p. 325.

Hab. Africa.

76. *VIDUA FISCHERI*.

Linura fischeri, Reichen. Orn. Centralbl. 1882, p. 91, Usegua (type exam.).

Vidua (Linura) fischeri, Reichen. J. f. O. 1882, p. 350, pl. ii. fig. 1, ♂ ♀.

Hab. E. Afr., Usegua.

77. *VIDUA REGIA*.

Emberiza regia, Linn. S. N. i. 1766, p. 313.

Veuve à quatre brins, Vieill. Ois. Chant. 1805, p. 59, pls. 34 (ad. good), 35 (juv.).

Vidua regia, Cuv. Règne An. i. 1817, p. 388.

Fringilla regia, Vieill. N. D. xii. 1817, p. 220.

Videstrella regia, Lafr. Rev. et Mag. Zool. 1850, p. 325.

Tetrænura regia, Reichb. Singvög. 1861, p. 61, pl. 26, figs. 217, 218.

Estrellda carlelita, Hartl. Ibis, 1868, p. 46 (Natal).

Hab. S. and W. Africa. In S. Africa it ranges from Matabele and the Transvaal to Damara and Benguela. In W. Africa it has probably been introduced; for M. Rochebrune is the only person who has recorded it from Casamanse and Senegambia, where, he states, it is rare.

78. *VIDUA PARADISEA*.

Emberiza paradisæa, Linn. S. N. i. 1766, p. 312, Angola.

Veuve à collier d'or, Vieill. Ois. Chant. 1805, p. 63, pls. 37 (ad. good), 38 (juv. good).

Fringilla paradisea, Vieill. N. D. xii. 1817, p. 213.

Vidua paradisea, Cuv. Règne An. i. 1817, p. 388.

Vidua verreauxi, Cass. Pr. Ac. Philad. 1850, June, p. 56, Abyssinia.

Steganura paradisea, Bp. Consp. i. 1850, p. 449.

Vidua sphænura, Verr. MS., fide Bp. loc. cit. July.

Steganura sphænura, Bp. loc. cit.

Videstrella paradisæ, Lafr. Rev. et Mag. Zool. 1850, p. 325.

Steganura paradisæ, var. *australis*, Heugl. Faun. Roth. Meeres, 1855, no. 161, fide Heugl. 1871.

Steganura verreauxi, Sclat. P. Z. S. 1864, p. 110.

Vidua paradisæ orientalis, Heugl. Orn. N.O.-Afr. 1871, p. 583.

Hab. The whole of Africa south from about 17° N. lat., except in the extreme south, as Natal, Cape Colony, and Namaqualand.

16. COLIUSPASSER.

Type.

1831. *Oryx*, Less. (nec Oken, 1816, Mam.)

Traité, Orn. p. 437 *C. capensis*.

1837. *Euplectes*, Swains. (nec *Euplectus*,

Leach, 1817) B. W. Afr. i. p. 180 *C. capensis*.

1835-40. *Coliuspasser*, Rüpp. Neue Wirb.

p. 98, pl. 36. fig. 2 *C. laticaudus*.

1847. *Penthetria*, Cab. Arch. Naturges.

1847, p. 331. *C. laticaudus*.

1849. *Coliustruthus*, Sundev. Œfv. K. Vet.-

Ak. Förh. Stockh. 1849, p. 158 . *C. laticaudus*.

1849. *Chera*, Gray, Gen. B. ii. p. 355 . . *C. procne*.

1850. *Orynx*, Reichb. Syst. Nat. p. 76 . . *C. capensis*.

1850. *Xanthomelana*, Bp. Consp. i. p. 447 . *C. capensis*.

1850. *Urobrachya*, Bp. loc. cit. *C. axillaris*.

1850. *Pentheria*, Bp. loc. cit. *C. laticaudus*.

1861. *Niobe*, Reichb. Singvög. p. 61, pl. 26.

figs. 219, 220 *C. ardens*.

Coliuspasser, although not a correctly classical name, cannot, I maintain, be superseded by *Penthetria*, proposed as an amendment more than seven years later.

The present genus, as I have employed it, contains a very well-marked group of species with many striking characters in common, and not differing in any more essential points than in the length of the tail in adult males. This genus more nearly approaches *Pyromelana* than *Vidua*, the winter

plumages in this and the next genus being almost identical in colouring.

The members of the present genus appear peculiarly liable to melanism, and I consider it proved that the *Vidua concolor*, Cass., is nothing but a black variety of *C. ardens*, for in the Berlin Museum I have examined three specimens from Malengue, in Angola—one entire black, labelled *Penthetria concolor*; another is the typical red-collared *C. ardens*; and the third is exactly intermediate, the collar being traced in dull red. Other varieties of this species I have seen with the collar orange.

There is at present in the Colonial and Indian Exhibition a specimen of *C. axillaris*, in which the chestnut on the wings is reduced to only a few markings. The amount of rufous is not an absolutely constant character, for there is a specimen in the British Museum from Mombas in which the wing is unrecognizable from that of the Natal bird. I therefore consider *C. phæniceus*, Heugl., which I once described as *Urobrachya zanzibarica*, as only a variety with no positively constant characters, but the commonest form of this species north of the Zambesi.

I have based my divisions of *C. capensis* with a large and small race, and *C. xanthomelas* as a subspecies, upon the colouring of the under surface of the quills, in the legs being paler and the thighs brown in *C. capensis*, while in *C. xanthomelas* the thighs are black; but this latter character is subject to modifications. The Camaroons bird, type of *Euplectes phænicomerus*, Gray, belongs to the small S.-African form. As the Camaroons is out of a natural range for this bird and no other specimens have been recorded from W. Africa, I should look upon it as possibly an escaped cage-bird.

Key to the Species.

- a. Under wing-coverts entirely black. Tail very long.
- a¹. Least series of wing-coverts scarlet, median series white 79. *C. procne*.

- b*¹. Entire wings black.
- b*². With or without a red or orange collar
across the base of the throat 80. *C. ardens*.
- c*². Crown, nape, and a broad collar red 81. *C. laticaudus*.
- b*. Under wing-coverts black, with the outer portion yellowish fawn-colour. Least wing-coverts orange, median series cinnamon 82. *C. hartlaubi*.
- c*. Under wing-coverts not black, with some bright colours on the wing-coverts.
- d*¹. Scapulars yellow. Lower back black.
- d*². Back between the scapulars black 83. *C. macrocercus*.
- e*². Entire mantle yellow 84. *C. macrurus*.
- e*¹. Entire back black.
- f*². With a conspicuous white basal portion to the primaries.
- f*³. Least wing-coverts bright yellow 85. *C. albonotatus*.
- g*³. Least wing-coverts chestnut 86. *C. eques*.
- y*². With no white on the quills. Tail of moderate length and rounded, with some chestnut on the wings.
- h*³. Lesser wing-coverts scarlet. 87. *C. axillaris*.
- i*³. Lesser wing-coverts chrome-yellow. 88. *C. bocagii*.
- f*¹. Upper back and upper tail-coverts black, remainder of the back yellow.
- h*². Legs pale brown; under surface of the quills paler, with distinct buff inner margins; upper surface of the wing-feathers more broadly edged with pale brown; thighs browner. 89. *C. capensis*.
- i*². Legs dark brown; under surface of the quills darker, with or without indications of narrow brown inner margins to the quills; upper surface of the wing-feathers less broadly edged with pale brown; thighs blacker 90. *C. xanthomelas*.

79. COLIUSPASSER PROCNE.

Emberiza procne, Bodd. Tabl. Pl. Enl. 1783, p. 39. no. 635.

Loxia caffra, Gm. S. N. i. 1788, p. 858.

Emberiza longicauda, Gm. tom. cit. p. 884.

Veuve à epaulettes, Vieill. Ois. Chant. 1805, p. 66, pls.

39 ♂, 40 ♀ (good).

Fringilla longicauda, Vieill. N. D. xii. 1817, p. 218.

Vidua longicauda, Cuv. Règne An. i. 1817, p. 388.

Fringilla caffra, Licht. Verz. Doubl. 1823, p. 22.

Vidua phænicopterus, Swains. Class. B. ii. 1837, p. 112, pl. 161.

Chera procne, Gray, Gen. B. ii. 1849, p. 355.

Penthetria longicauda, Licht. Nomencl. 1854, p. 49.

Chera caffra, Reichb. Singvög. 1861, p. 65, pl. 29. figs. 230-232.

Hab. S. Africa: Transvaal, Natal, eastern portion of Cape Colony, and Benguela.

80. COLIUSPASSER ARDENS.

Emberiza ardens, Bodd. Tabl. Pl. Enl. 1783, p. 39, no. 647.

Emberiza signata, Scop. Faun. et Flor. Insub. 1786, p. 95, ex Sonn.

Emberiza panayensis, Gm. S. N. i. 1788, p. 885.

Vidua lenocinia, Less. Traité Orn. 1831, p. 437, Cape (in partial moult).

Vidua torquata, Less. Compl. Buff. viii. 1837, p. 278, Cape (with a yellow collar).

Vidua rubritorques, Swains. B. W. Afr. i. 1837, p. 174, Senegambia.

Vidua concolor, Cass. Pr. Ac. Philad. 1848, p. 66, Africa (black var.); id. Journ. Ac. Philad. 1849, p. 241, pl. 30. fig. 1.

Vidua ardens, Gray & Mitchell, Gen. B. ii. 1849, p. 355.

Coliustruthus concolor, Sundev. Æfv. K. Vet.-Ak. Förh. Stockh. 1849, p. 158.

Penthetria rubritorques, Bp. Consp. i. 1850, p. 448.

Penthetria concolor, Bp. loc. cit.

Penthetria ardens, Cab. Mus. Hein. i. 1851, p. 177.

Niobe ardens, Reichb. Singvög. 1861, p. 61, pl. 26. figs. 219, 220.

Penthetria hartlaubi, Cab. (nec Bocage, 1881) J. f. O. 1883, p. 318, Wakkola (Emin Bey, type exam.).

Coliustruthus ardens, Finsch, J. f. O. 1885, p. 135.

Hab. S.E. and W. Africa. On the eastern side it ranges

from about 5° N. lat. to Natal and the eastern portion of Cape Colony, and has been recorded on the West Coast from Angola, Sierra Leone, and Senegambia.

81. *COLIUSPASSER LATICAUDUS.*

Fringilla laticauda, Licht. Verz. Doubl. 1823, p. 24, Nubia.

Coliuspasser torquatus, Rüpp. Neue Wirb. 1835-40, pp. 98, 101, pl. 36. fig. 2, Simien.

Vidua laticauda, Gray & Mitchell, Gen. B. ii. 1849, p. 355.

Penthetria laticauda, Bp. Consp. i. 1850, p. 448.

Coliuspasser laticauda, Blanf. Geol. & Zool. Abyss. 1870, p. 405.

Hab. N.E. and E. Africa, from about 15° N. to 4° S. lat. ; Abyssinia, Shoa, Kilimanjaro.

82. *COLIUSPASSER HARTLAUBI.*

Penthetria hartlaubi, Bocage, Orn. Angola, 1881, p. 341, Caconda.

Hab. S. Africa ; Caconda in Benguela.

83. *COLIUSPASSER MACROCERCUS.*

Yellow-shouldered Oriole, Brown, Ill. Zool. 1776, p. 22, pl. 11 (good).

Fringilla macrocerca, Licht. Verz. Doubl. 1823, p. 24, note d, Nubia.

Coliuspasser flaviscapulatus, Rüpp. Neue Wirb. 1835-40, pp. 98, 101, Abyssinia (type exam.).

? *Coliuspasser macrurus*, Rüpp. Syst. Uebers. 1845, p. 77, Abyssinia.

Vidua macrocerca, Des Murs in Lefebvre's Voy. Abyss. 1845-50, p. 172.

Penthetria flaviscapulatus, Bp. Consp. i. 1850, p. 449.

Penthetria macroura, Cab. Mus. Hein. i. 1851, p. 176.

Hab. N.E. Africa, between 15° and 10° N. lat. Confined to Abyssinia.

a, ♂. July, N.E. Africa (*Brit. Mus.*).

84. COLIUSPASSER MACRURUS.

Loxia macroura, Gm. S. N. i. 1788, p. 845.

Loxia longicauda, Lath. (nec Gm.) Ind. Orn. i. 1790, p. 373.

Fringilla flavoptera, Vieill. Ois. Chant. 1805, p. 69, pl. 41 (good).

Fringilla chrysoptera, Vieill. N. D. xii. 1817, p. 214.

Penthetria macroura, Cab. Orn. Notiz. 1847, p. 331.

Vidua macroura, Gray & Mitchell, Gen. B. ii. 1849, p. 355.

Coliustruthus macrourus, Cass. Pr. Ac. Philad. 1859, p. 136.

Coliuspasser macroura, Bouvier, Cat. Marche, 1875, p. 24.

Hab. N.E., E., and W. Africa South from about 15° N. lat.; it ranges to Melindi on the east coast, and to the Quanza on the west.

85. COLIUSPASSER ALBONOTATUS.

Vidua albonotata, Cass. Pr. Ac. Philad. 1848, p. 65, Natal; id. Journ. Ac. Philad. 1849, p. 241, pl. 30. fig. 2.

Urobrachya albonotata, Bp. Consp. i. 1850, p. 448.

Penthetria albonotata, F. & H. Vög. Ostaf. 1870, p. 420.

Hab. S. and W. Africa: Shiré, Zambesi, Matabele, Transvaal, Natal, Benguela, Angola, Loanga Coast, and Gaboon.

a. Gaboon (*Brit. Mus.*).

86. COLIUSPASSER EQUES.

Vidua eques, Hartl. P. Z. S. 1863, p. 106, pl. 15, Kazeh (Speke).

Penthetria eques, F. & H. Vög. Ostaf. 1870, p. 420.

Urobrachya eques, Fisch. Zeitsch. ges. Orn. 1884, p. 326.

Hab. E. Africa, between 5° N. lat. and 5° S. lat.; from Lado to Kitui.

87. COLIUSPASSER AXILLARIS.

Vidua, sp.?, Smith, S. Afr. Quart. Journ. 1831, p. 12.

Vidua axillaris, Smith, Ill. Zool. S. Afr. 1838; pl. 17 (good), Caffraria.

Urobrachya axillaris, Bp. Consp. i. 1850, p. 447, S. Africa.

Coliuspasser phæniceus, Heugl. Syst. Uebers. 1856, p. 39, no. 394, Sobat R. (no descr.).

Urobrachya axillaris, Antin. Cat. 1864, p. 68, N.E. Africa.

Penthetria axillaris, F. & H. Vög. Ostaf. 1870, p. 421.

Urobrachya zanzibarica, Shelley, P. Z. S. 1881, p. 586, Lamu, Malindi, Pangani.

Urobrachya phænicea, Cab. J. f. O. 1882, p. 122.

Hab. N.E., E., and S. Africa. Southward from about 9° N. lat. to Mosambique, also Natal and the eastern portion of Cape Colony.

The N.E. and E. African may generally, but not always, be distinguished from the S. African birds.

a, ♂ ad. Bombalike, near Mombas (*Brit. Mus.*). In this specimen the wing is unrecognizable from that of the S. African bird; but the bill is slightly stouter and rougher.

88. COLIUSPASSER BOCAGII.

Urobrachya axillaris, Sharpe (nec Smith), P. Z. S. 1869, p. 566, Colombo, in Angola (spec. exam.).

Urobrachya bocagei, Sharpe, Cat. Afr. B. 1871, p. 63, Angola, Mossamedes (types exam.).

Penthetria bocagei, Bocage, Orn. Angola, 1881, p. 343, Benguela, Quanza.

Urobrachya affinis, Cab. Orn. Centralbl. 1881, p. 183, *Hab.*? (type exam.).

Urobrachya mechowii, Cab. loc. cit., Angola (type exam.).

Hab. S. and W. Africa. Confined to Benguela and Angola.

89. COLIUSPASSER CAPENSIS.

Loxia capensis, Linn. S. N. i. 1766, p. 306, Cape.

Loxia nævia, Gm. S. N. i. 1788, p. 845 (in moult).

Coccothraustes capensis, Vieill. N. D. xiii. 1817, p. 527.

Fringilla phalerata, Licht. Verz. Doubl. 1823, p. 22, Cape.

Oryx capensis, Less. Traité Orn. 1831, p. 438.

Euplectes capensis, Hartl. Verz. Brem. 1844, p. 69.

Corythus capensis, Hahn & Küst. Vög. As. &c. Lief. xiv. 1850, pl. 4.

Orynx approximans, Cab. Mus. Hein. i. 1851, p. 177, S. Afr. (small var.).

Oryx minor, Reichb. Singvög. 1861, p. 59, pl. 24. figs. 210, 211, S. Afr. (small var.).

Euplectes phoenicomerus, Gray, Ann. & Mag. Nat. Hist. ser. 3, vol. x. p. 444 (1862), Camaroons (type exam.).

Ploceus capensis, Pelz. Reise Novara, Vög. 1865, p. 90.

Euplectes xanthomelas, Gurney (nec Rüpp.), Ibis, 1868, p. 51, Natal.

Pyromelana capensis, Sharpe's ed. Layard, B. S. Afr. 1884, pp. 463, 849.

Hab. The whole of South Africa and the Camaroons in W. Africa, the larger race being apparently confined to Cape Colony.

90. COLIUSPASSER XANTHOMELAS.

Euplectes xanthomelas, Rüpp. Neue Wirb. 1835-1840, p. 94, Abyssinia; id. Syst. Uebers. 1845, p. 76, pl. 28 (good).

Euplectes stictus, Heugl. Syst Uebers. 1865, p. 39.

Pyromelana capensis, F. & H. Vög. Ostaf. 1870, p. 416 (part.), E. Afr.

Euplectes capensis, Heugl. Orn. N.O.-Afr. 1871, p. 573.

Orynx xanthomelas, Cab. J. f. O. 1878, p. 231.

Oryx xanthomelas, Fisch. & Reichen. J. f. O. 1879, p. 351.

Oryx capensis, Fisch. J. f. O. 1885, p. 134.†

Hab. N.E., E., S., and W. Afr. In E. Africa from about 15° N. lat. to about 20° S. lat. ; Abyssinia to Matabele Land.

There is a very typical specimen in the British Museum labelled Hope Fontein, near Gubelewaya (*Oates*).

17. PYROMELANA.

1831. *Pyromelana*, Bp. Saggio Distr. Met. An. Vert. Type.

1831, p. 141 *P. orix*.

1861. *Taha*, Reichb. Singvög. p. 73 *P. taha*.

This is a very well-defined compact genus, composed of thirteen species, of which ten are very strongly marked; the other three, *P. scioana*, Salvad., *P. taha*, Smith, and *P. sticta*, Heugl. (= *P. ladoensis*, Reichen.), have been frequently confounded, but are, I consider, undoubtedly good species.

To the surrounding genera, *Coliuspasser* and *Quelea*, they show a marked affinity in the colouring of their winter dress.

Key to the Species.

- a. Under surface of the wings entirely black.
 - a¹. Crown, neck, and lower back orange-red; mantle reddish fawn-colour; upper half of throat black 91. *P. flammiceps*.
 - b¹. Front half of the crown black; mantle yellow; rump and upper tail-coverts brown; black of throat confined to chin..... 92. *P. gierowi*.
- b. Under surface of the wings not black.
 - c¹. Entire neck red.
 - c². Upper and under tail-coverts and pale portion of the abdomen not red..... 93. *P. friedrichsoni*.
 - d². Upper and under tail-coverts and pale portion of the abdomen red.
 - d³. Chin and upper throat black 94. *P. orix*.
 - e³. Chin and entire throat red.
 - e⁴. Entire upper half of the head black .. 95. *P. franciscana*.
 - f⁴. Black on upper half of the head confined to the forehead..... 96. *P. nigrifrons*.
 - d¹. Crown and back half of the neck red; entire throat black 97. *P. nigriventris*.
 - e¹. Forehead and front of crown red; remainder of the head and neck black 98. *P. diademata*.
 - f¹. Entire head black; back orange-yellow 99. *P. aurea*.
 - g¹. Crown, lower back, and upper and under tail-coverts bright yellow.
 - g². With no yellow collar across the lower throat.
 - g³. Larger: wing 2·8 inches; with no yellow on the chest 100. *P. scioana*.
 - h³. Smaller: wing 2·5 to 2·2 inches; with a yellow patch on each side of the crop.
 - h⁴. Larger: wing 2·4 to 2·5 inches; sides of the body between the crop-patch and thigh not mottled with yellow.. 101. *P. taha*.

- i⁴. Smaller: wing 2·2 inches; sides of the body between the crop-patch and thigh yellow, or mottled with yellow 102. *P. sticta*.
 h². With a yellow collar across the crop . . . 103. *P. afra*.

91. PYROMELANA FLAMMICEPS.

Euplectes flammiceps, Swains. B. W. Afr. i. 1837, p. 186, pl. 13, Senegal.

Oryx petiti, Des Murs, in Lefebvre's Voy. Abyss. 1845-50, p. 112.

Euplectes craspedopterus, Heugl. Syst. Uebers. 1856, p. 30, no. 383.

Euplectes flaviceps (laps. cal.), Hartl. P. Z. S. 1863, p. 106.

Euplectes pyrrhozana, Heugl. J. f. O. 1864, p. 247.

Pyromelana flammiceps, F. & H. Vög. Ostaf. 1870, p. 414.

Hab. N.E., E., S.?, and W. Afr., between about 15° N. lat. and 10° S. lat. From Abyssinia to Lindi on the east coast, and from the Quanza to Senegal on the west. ? Benguela (*Brit. Mus.*).

92. PYROMELANA GIEROWI.

Euplectes gierowii, Cab. Orn. Centralbl. 1880, p. 6, Quanza; id. J. f. O. 1880, p. 106, pl. 3. fig. 2.

Hab. W. Afr., Quanza in Angola.

93. PYROMELANA FRIEDERICHSONI.

Euplectes friederichsoni, Fisch. & Reichen. J. f. O. 1884, p. 54, Ngaruman.

Hab. E. Afr., Ngaruman.

94. PYROMELANA ORIX.

Grenadier, Edw. Nat. Hist. B. 1743, pl. 178 (fair).

Emberiza orix, Linn. S. N. i. 1766, p. 309, ex Edw.

Loxia orix, Daud. Traité Orn. ii. 1800, p. 377, Cape.

Loxie orix, Vieill. Ois. Chant. 1805, p. 100, pl. 66 (good).

Coccothraustes orix, Vieill. N. D. xiii. 1817, p. 536.

Oryx oryx, Less. Traité Orn. 1831, p. 438.

Euplectes oryx, Swains. B. W. Afr. i. 1837, p. 187.

Euplectes sundevallii, Bp. Consp. i. 1850, p. 446, Caf-fraria.

Euplectes pseudoryx, Reichb. Singvög. 1861, p. 56, pl. 23. figs. 200-202.

Euplectes edwardsi, Reichb. tom. cit. p. 57, ex Edw.

Euplectes petiti, Kirk, Ibis, 1864, p. 322, Zambesi and Shiré.

Pyromelana oryx, F. & H. Vög. Ostaf. 1870, p. 410.

Ploceus oryx, Woodward, Zoologist, 1875, p. 4397.

Pyromelana sundevalli, Holub & Pelz. Beitr. Orn. Südaf. 1882, p. 117.

Hab. S. Afr.: the whole of S. Afr.

95. PYROMELANA FRANCISCANA.

Loxia franciscana, Isert, Schrift. Gesell. Nat. Freunde Berlin, ix. 1789, p. 332, pl. 9 (fide Finsch & Hartl.).

Loxia ignicolor, Vieill. Ois. Chant. 1805, p. 92, pl. 59 (good), Senegal.

Fringilla ignicolor, Vieill. N. D. xii. 1817, p. 198.

Euplectes ignicolor, Swains. B. W. Afr. i. 1837, p. 184.

Fringilla oryx, Dubois, Orn. Galerie, 1839, p. 44, pl. 29.

? *Euplectes oryx*, Des Murs, in Lefebvre's Voy. Abyss. 1845-50, p. 111.

Euplectes franciscanus, Hartl. Orn. W.-Afr. 1857, p. 128.

Pyromelana franciscana, Finsch, J. f. O. 1869, p. 336.

Hab. N.E., E., and W. Afr., between about 15° N. lat. to 5° S. lat., south to Myamusi in East Africa, and to the Gold Coast and Niger on the west coast.

96. PYROMELANA NIGRIFRONS.

Pyromelana nigrifrons, Böhm, J. f. O. 1884, p. 177, Karema.

Hab. Central Africa, Karema on Lake Tanganyika.

97. PYROMELANA NIGRIVENTRIS.

Euplectes nigriventris, Cass. Pr. Ac. Philad. 1848, p. 66, Zambesi; id. Journ. Ac. Philad. 1849, p. 242, pl. 31. fig. 1.

Euplectes, sp.?, Licht. Nomencl. 1854, p. 49, Mosambique.

Pyromelana nigriventris, F. & H. Vög. Ostaf. 1870, p. 415.

Hab. E. Afr., between about 2° and 15° S. lat.; from Lamu to Mosambique.

98. PYROMELANA DIADEMATA.

Euplectes diademata, Fisch. & Reichen. J. f. O. 1878, pp. 264, 354, Malindi (type exam.) ; 1879, pl. 2. fig. 1.

Hab. E. Afr., Malindi.

99. PYROMELANA AUREA. (Plate IX. fig. 2.)

Golden-backed Finch, Brown, Ill. Zool. p. 60, pl. 25. fig. 2, Benguela.

Loxia aurea, Gm. S. N. i. 1788, p. 846, ex Brown.

Euplectes aurinotus, Swains. An. in Menag. 1838, p. 310, ex Brown.

Hab. S.W. Afr., Benguela and Quanza.

100. PYROMELANA SCIOANA.

Euplectes scioanus, Salvad. Ann. Mus. Civ. Gen. 1884, p. 185, Shoa.

Hab. N.E. Afr., Shoa.

a, ♂. August, Shoa (*Antinori*, typical specimen, *Shelley Mus.*).

101. PYROMELANA TAHA.

Euplectes taha, Smith, Rep. Exp. Expl. Centr. Afr. 1836, p. 50, Kurrichaine ; id. Ill. Zool. S. Afr. pl. 7.

Ploceus dubius, Smith, Rep. Exp. Expl. Centr. Afr. 1836, p. 50 (in moult).

Euplectes abyssinicus, Strickl. & Sclat. (nec Gm.), Contr. Orn. 1850, p. 150, Damara.

Taha dubia, Reichb. Singvög. 1861, p. 73.

Hab. S. Afr. : confined to S. Africa, where it is very generally distributed.

102. PYROMELANA STICTA.

? *Fringilla abyssinica*. Gm. S. N. i. 1788, p. 927.

Euplectes abyssinicus, Rüpp. Syst. Uebers. 1845, p. 76, Abyssinia.

Euplectes stictus, Heugl. Syst. Uebers. 1856, p. 39. no. 385, Simen.

? *Taha abyssinica*, Reichb. Singvög. 1861, p. 73, ex Gm.

Euplectes taha, Antin. Cat. 1864, p. 68.

Euplectes habessinicus, Heugl. Orn. N.O.-Afr. 1871, p. 575 (part.), N.E. Afr.

Orynx afer, Heugl. tom. cit. App. 1873, p. cxxxiii (part.), N.E. Afr.

Euplectes ladoensis, Reichen. J. f. O. 1885, p. 218, Lado (type exam.).

Hab. N.E. Afr., Abyssinia and the Nile-region between 15° and 5° N. lat.

a, ♂. June; *b*, ♂. August, Lado (*Shelley Mus.*).

103. PYROMELANA AFRA.

Black-bellied Grosbeak, Brown, Ill. 1776, p. 58, pl. 24. fig. 2.

Loxia afra, Gm. S. N. i. 1788, p. 857, ex Brown.

Loxia melanogastra, Lath. Ind. Orn. i. 1790, p. 394, ex Brown.

Worabée, Vieill. Ois. Chant. 1805, p. 52**, pl. 28** (fair).

Fringilla abyssinica, Vieill. N. D. xii. 1817, p. 232.

? *Coccothraustes melanogastra*, Vieill. N. D. xiii. 1817, p. 543.

Fringilla ranunculacea, Licht. Verz. Doubl. 1823, p. 23, ex Worabée (Vieill.).

Euplectes melanogastra, Swains. B. W. Afr. i. 1837, p. 182, Senegal.

Euplectes afer, Sharpe, Cat. Afr. B. 1871, p. 62.

Pyromelana afra, Shelley, Ibis, 1883, p. 552.

Hab. W. Afr., from the Niger to Senegambia and Fernando Po. The locality Quanza (*Whitely*), fide Bocage, Orn. Angola, p. 338, is probably incorrect.

18. QUELEA.

Type.

1850. *Quelea*, Reichb. Syst. Nat. pl. 76 . . . *Q. quelea*.

1851. *Hyphantica*, Cab. Mus. Hein. i. p. 180 . . . *Q. quelea*.

This genus I have divided into four species belonging to two well-marked groups—one characterized by the bill not being red, and in the fully adult male by a red head, the other group by a red bill in both sexes. In the former the winter plumage is almost precisely the same as in *Pyromelana*.

The members of the red-billed group are certainly subject to considerable variation in brightness, according to age and season, and occasionally somewhat in size; but I can detect no constant characters for the separation of these varieties.

I have not kept *Q. russi* as a distinct species, as it appears to me to be only a pale-headed variety of the male of *Q. æthiopica*, or a very fully plumaged female of that species; and *Q. quelea* has a similar variety.

Key to the Species.

- a. Bill never red; head red in adult males.
 - a¹. Bill longer, culmen less curved; wing 2·5 inches.
In adult males base of the red feathers of the throat black 104. *Q. erythrops*.
 - b¹. Bill shorter, culmen more curved; wing 2·3 inches. In adult males base of the red feathers of the throat white 105. *Q. cardinalis*.
- b. Bill red; no scarlet on the head.
 - c¹. In adult males, sides of the head and upper half of the throat black.
 - c². Forehead black 106. *Q. quelea*.
 - d². Forehead not black 107. *Q. æthiopica*.

104. QUELEA ERYTHROPS.

Ploceus erythrops, Hartl. Rev. Zool. 1848, p. 110, St. Thomas Is.

Euplectes erythrops, Hartl. Abhandl. nat. Ver. Brem. ii. 1848, pl. 8.

Fringilla erythrocephala, Des Murs (nec Linn.), Lefebvre's Voy. Abyss. 1850, p. 119, Adowa.

Foudia erythrops, Bp. Consp. i. 1850, p. 446.

Quelea capitata, Du Bus, Bull. Acad. Brux. xxii. part 1, 1855, p. 151, Senegal.

Quelea erythrops, Heine, J. f. O. 1860, p. 144.

Foudia hæmatocephala, Heugl. J. f. O. 1864, p. 250, Bongo.

Calypantria hæmatocephala, Heugl. J. f. O. 1867, p. 390.

Ploceus hæmatocephala, F. & H. Vög. Ostaf. 1870, p. 407, note.

Hyphantica hæmatocephala, Heugl. Orn. N.O.-Afr. 1871, p. 545, pl. 19a.

Hyphantica erythrops, Fisch. & Reichen. J. f. O. 1879, p. 352.

Hab. E. and W. Afr. In E. Africa between 8° N. lat. and 5° S. lat., from Bongo to Pangani, and the whole of W. Africa from the Quanza to Senegambia, and the Islands of St. Thomas and Prince.

105. QUELEA CARDINALIS.

Hyphantica cardinalis, Hartl. J. f. O. 1880, p. 325, Lado; 1881, pl. 1. figs. 1, 2.

Hab. E. Afr., between about 5° N. lat. and 5° S. lat., from Lado to Ngaruman.

a, ♂. June; b, ♀. August, Lado (*Shelley Mus.*).

106. QUELEA QUELEA.

Brazilian Sparrow, Edw. Nat. Hist. B. 1743, p. 128, pl. 271. fig. 2.

?*Loxia sanguinirostris*, Linn. S. N. i. 1766, p. 303, Asia.

Emberiza quelea, Linn. tom. cit. p. 310, Africa (orig. descr. good).

Loxia quelea, Daud. Traité Orn. ii. 1800, p. 443.

Dioch, Vieill. Ois. Chant. 1805, p. 46, pls. 22 ♂, 23 ♀.

Dioch rose, Vieill. tom. cit. p. 48, pl. 24.

Fringilla quelea, Vieill. N. D. xii. 1817, p. 233.

Loxia lathamii, Smith, Rep. Exp. Expl. Centr. Afr. 1836, p. 51, Kurrichaine.

Euplectes sanguinirostris, Swains. B. W. Afr. i. 1837, p. 188.

Ploceus sanguinirostris, Chapman, Trav. S. Afr. ii. 1848, p. 401.

Quelea sanguinirostris, Bp. Consp. i. 1850, p. 445.

Hyphantica sanguinirostris, Cab. Mus. Hein. i. 1851, p. 180 (part.).

Quelea occidentalis, Hartl. Orn. W.-Afr. 1857, p. 129, Senegal, Casamanse, Guinea.

Quelea lathamii, Reichb. Singvög. 1861, p. 67, pl. 30. figs. 236-238.

Quelea quelea, Shelley, Ibis, 1882, p. 356.

Hab. S. and W. Afr. The whole of S. Africa and W. Africa, from Guinea to Senegambia.

a, ♂, Transvaal, no. 77.7.11.343, has the typical black of the head surrounded by pink; *b*, “♂,” Transvaal, no. 77.7.11.167, has the portions of the head which are black in typical adult males buff, and these parts are surrounded with pink (*Brit. Mus.*). *b* is a good S.-African parallel of *Ploceus russi*, Finsch. There is another striking variety of both this and the next species, which is not very uncommon, in which the plumage is rufous or cinnamon, strongly mottled with black.

107. QUELEA ÆTHIOPICA.

Emberiza quelea, Des Murs (nec Linn.), in Lefebvre's Voy. Abyss. 1850, p. 119.

Ploceus sanguinirostris, var. *æthiopicus*, Sundev. Œfv. K. Vet.-Ak. Förh. Stockh. 1850, p. 126.

Ploceus sanguinirostris var. *major*, Sundev. l. c.

Ploceus sanguinirostris, Strickl. P. Z. S. 1850, p. 218, Kordofan.

Coccothraustes sanguinirostris, Heugl. Syst. Uebers. 1856, p. 39. no. 357.

Quelea orientalis, Heugl. J. f. O. 1862, p. 27, Bogos, Abyssinia.

Quelea sanguinirostris, Antin. Cat. 1864, p. 67.

Quelea æthiopica, Blanf. Geol. & Zool. Abyss. 1870, p. 405.

Ploceus russi, Finsch, Gefied. Welt, 1877, p. 317, Africa.

Hyphantornis quelea, Cab. J. f. O. 1878, p. 232.

Hyphantica sanguinirostris, Finsch, J. f. O. 1885, p. 134.

Euplectes gregaria, P. v. Würt. MS. }

Loria africana, P. v. Würt. MS. }

Quelea socia, P. v. Würt. MS. }

fide Heugl.

Hab. N.E. and W. Afr., southward from about 18° N.

lat. to Ugogo, and possibly Mosambique, on the east side, and to Senegambia on the west coast.

a and *b* (*Brit. Mus.*). Bright varieties: cheeks and ear-coverts buff, breast shaded with rufous; very typical forms of *Ploceus russi*, Finsch. I have examined very similar specimens in the Berlin and Paris Museums. They have occasionally the sides of the head and throat, which would be black in typical males, slightly marked out in brown; but I find no sex attached to any of the labels. In the Zoological Society's Gardens there is now a very fine living specimen of this form, which I regard as a variety of *Q. aethiopica*, although I am unable to prove such to be the case.

XXXVI.—*Additional Notes on the Genus Acanthis.*

By W. EDWIN BROOKS.

THANKS to the kindness of Dr. L. Stejneger, of the United States National Museum, I have been able to examine a number of Redpolls of different species, and I find that it is necessary to supplement my notes on these birds in 'The Ibis' for October 1885, pp. 381–384, by some additional particulars.

The superiority of the broad white edgings to the tertials and tail-feathers, but especially the latter, in *Acanthis exilipes* will not hold good; for *A. hornemanni*, in good fresh feather, has very marked white edges to the tail-feathers. There is also much white on the tertials. The reliable distinction between the two is certainly the very great difference in size. The wings of three male *A. hornemanni* now before me measure 3.42, 3.30, and 3.28 inches; and of three male *A. exilipes* 3.00, 2.90, and 2.90. In his paper in 'The Auk' for April 1884, Dr. Stejneger gives the average for the wings of six male *A. hornemanni* as 3.40, and of seventeen male *A. exilipes* as 2.91, of six female *A. hornemanni* 3.31, and of twelve female *A. exilipes* 2.80. I think it may also be remarked here that the wing of *A. exilipes* averages longer than that of *A. linaria*.